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Vol. 1 No. 1-5.



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OCEAN WEATHER STATION 'P'
NORTH PACIFIC OCEAN

9173

January 23, 1965 to April 19, 1965

CODC Reference: 02-65-001

No. 1-5

1966 Data Record Series

Canadian Oceanographic Data Centre
615 Booth St., Ottawa, Canada

Programmed by the Canadian Committee on Oceanography



FISHERIES RESEARCH BOARD OF CANADA

Ocean Weather Station "P" North Pacific Ocean

Ships:	CCGS "St. Catharines"	CCGS "Stonetown"
Local Cruise designations:	P-65-1	Patrol No. 64
Cruise periods:	Jan. 23 - Mar. 10, 1965	Mar. 6 - Apr. 19, 1965
Observer:	J. Wong	

PACIFIC OCEANOGRAPHIC GROUP - Nanaimo, B. C.

SECTION I

Description of data collection procedures



Figure 1.

The Canadian Weather Ship C.C.G.S. " St. Catharines " .

(D.O.T. Photo)

The oceanographic winch is located on the starboard side of the signal deck, just aft of the bridge wing.



Figure 2.

The Canadian WeatherShip C.C.G.S. "Stonetown".

(D.O.T. Photo)

Bathythermograph soundings boom can be seen below the bridge on the signal deck.

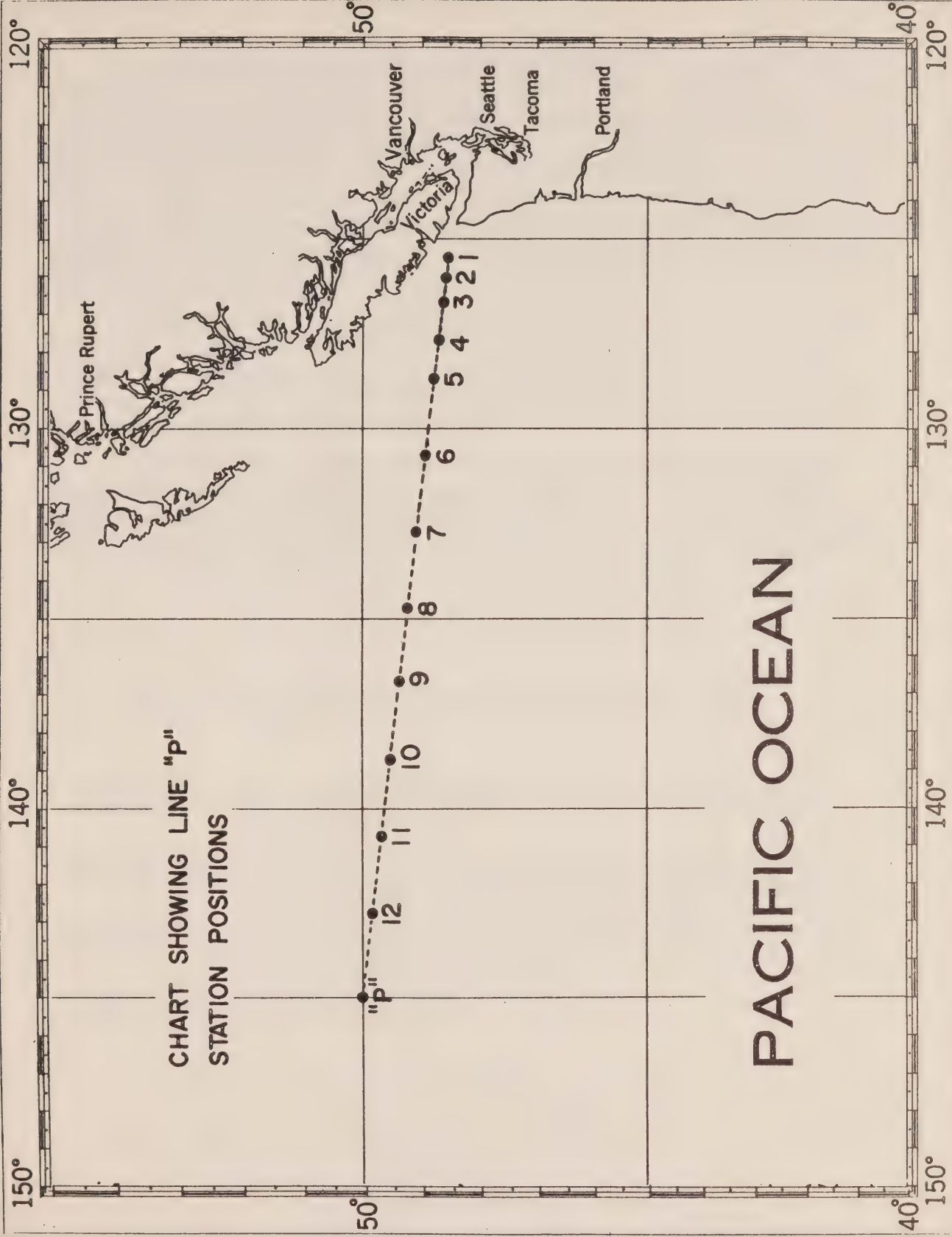


CHART SHOWING LINE "P"
STATION POSITIONS

PACIFIC OCEAN

Prince Rupert

Vancouver

Seattle

Tacoma

Portland

Victoria

"P"

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12

INTRODUCTION

Canadian operation of Ocean Weather Station "P" (latitude 50°00'N, longitude 145°00'W) was inaugurated in December 1950. The Station is manned by two vessels of the Canadian naval frigate class operated by the Marine Services of the Department of Transport. They are the CCGS "St. Catharines" and the CCGS "Stonetown" (Fig. 1 and 2) (Atlantic Oceanographic Group, MS, 1961). Each ship remains on Station for a period of 6 weeks, and is then relieved by the alternate ship, thus maintaining a continuous watch. The chief purpose of the Station is to operate as a meteorological station for surface and upper-air observations, and as an air-sea rescue station.

Bathythermograph observations have been made at Station "P" since July 1952. A program of more extensive oceanographic observations at Station "P" was commenced in August 1956. Since April 1959, a series of oceanographic stations has been frequently observed along the route between Station "P" and Swiftsure Bank (Fig. 3).

The CCGS "St. Catharines" is equipped with deck and laboratory facilities required to make oceanographic observations. Oceanographers from the Pacific Oceanographic Group accompany the ship on each patrol. The CCGS "Stonetown" is equipped with bathythermograph sounding equipment, and the BT observations are made by members of the ship's crew.

CRUISE LOG, CCGS "ST. CATHARINES", SURVEY P-65-1

- JANUARY 22: ship departed from Esquimalt, B. C., enroute to Ocean Weather Station "P".
- JANUARY 25: relieved CCGS "Stonetown" on Station "P" and commenced regular oceanographic and bathythermographic programs.
- MARCH 8: rendezvous with CCGS "Stonetown" and proceeded on return journey to base.
- MARCH 11: berthed at Esquimalt, B. C.

CRUISE LOG, CCGS "STONETOWN", PATROL NO. 64

- MARCH 5: departed Esquimalt, B. C. and proceeded to Ocean Weather Station "P".
- MARCH 8: relieved CCGS "St. Catharines" at Station "P" and commenced St. Catharines daily bathythermograph observations.
- APRIL 19: rendezvous with CCGS "St. Catharines" and proceeded on return journey to base.
- APRIL 22: berthed at Esquimalt, B. C.

OBSERVATIONAL PROCEDURES

1. Samples at depth were obtained with Nansen reversing water samplers. Stations to 400 m were observed in one cast, whilst deeper stations were observed in 2 casts - the first to 400 m, and the second from 500 m to the deepest sampler.
2. Seawater temperatures (except 0 m) were measured with paired protected reversing thermometers at every depth except 150, 175, 200, and 250 m, where three protected thermometers were used at each depth. Unprotected reversing thermometers were used on all samplers from 300 m to the deepest.
3. Surface samples (0 m) for salinity and dissolved oxygen determinations were obtained in a one-gallon plastic bucket. The surface temperature was measured in this sample with an armoured thermometer graduated in 0.5 C° intervals.
4. Water transparency observations were made with a white secchi disc of 30 cm diameter.
5. Station locations were determined by the officers of the watch, who also made the meteorological observations reported with the oceanographic data.

LABORATORY PROCEDURES

The salinity determinations of the oceanographic station samples and the surface samples collected during Survey P-65-1 were made with an inductive salinometer, Model 601 MK III, manufactured by Auto-Lab Industries Pty. Ltd., Sydney, Australia (Brown and Hamon, 1961). Most of the samples were analysed on board ship. The salinity data are the means of duplicate determinations whose "conductivity ratio" values fell within an acceptable range. The accuracy of the determinations at the 35‰ salinity level is stated to be ± 0.003 ‰ (Brown and Hamon, 1961). Because of an occasional error in standardization technique for the inductive salinometer, the accuracy of the salinity data for several stations varies from the accepted ± 0.003 ‰ value. The estimated accuracies for the stations affected are as follows: Cons. No. 001 to 004 ± 0.005 ‰; Cons. No. 005, 006 ± 0.011 ‰; Cons. No. 007, 008, 009 ± 0.010 ‰; Cons. No. 010 to 013 ± 0.020 ‰. The surface samples collected during the "Stonetown" Patrol No. 64 were analysed in the shore laboratory using the MK III conductivity salinometer. These data are from a single determination and have an accuracy range of ± 0.009 ‰ at the 95% probability level (Strickland, MS, 1958).

The dissolved oxygen analyses were done in the shipboard laboratory by a modified Winkler method (Strickland and Parsons, 1965).

The ocean productivity measurements were made according to the methods described by Strickland (1960). Results will be reported later in a publication of the Fisheries Research Board.

BATHYTHERMOGRAMS

The BT traces have been drawn on standard pre-printed graphs resembling BT calibration grids. The slides were positioned on the appropriate calibration grid in an adjustable holder. The BT traces were aligned on the grid using a temperature value obtained from a thermograph recording of the engine-room intake temperature, which had been carefully checked with a 3 m reversing thermometer temperature. The top of the trace was always aligned with the zero-depth grid line.

The bathythermograms are arranged in a chronological order on the pages. The date-time and position information are recorded below each bathythermogram. For the "St. Catharines" group the date-time order of arrangement is: day-month-year-hour. Observations made at an oceanographic

station are identified by an asterisk (*) preceding the date-time group. For the "Stonetown" group the date-time order of arrangement is: hour-day-month-year.

Copies of the bathythermograms for the "St. Catharines" survey P-65-1 are also available at the Canadian Oceanographic Data Centre on their BT Aperture Cards (Sauer, 1964).

PERSONNEL

The oceanographer on board the CCGS "St. Catharines" during survey P-65-1 was Mr. J. Wong. The ship's master was Captain A. A. R. Dykes. The officers and men of both weatherships took the BT observations, and the crew of the "St. Catharines" gave excellent assistance in making the oceanographic observations. Assisting in the compilation of the data were Messrs. D. G. Robertson and H. J. Hollister.

SECTION II

Description of the machine-generated data record

INTRODUCTION

This section applies to the machine processing phase of the data reduction and computation.

The oceanographic data previously recorded on CODC data summary forms, a sample of which is shown on the next page, are transferred to punch-cards for subsequent electronic data processing on an IBM 1620 computer, using CODC's OCEANS II program. In addition to computing routine derived quantities, the program carries out unit and format conversions, range checks, plausibility tests, internal editing, and if required, interpolation at standard oceanographic depths. When interpolations are carried out, additional derived values are computed.

After the data have been processed, the data record is prepared using an IBM 1401 computer configuration with the OCEAN REPORT III program, which provides for pre-edited high speed print-out on continuous direct-image masters. These masters subsequently yield the required volume of copies for distribution.

Provision has been made to enter an **"estimate of precision"** for each observed variable selected for interpolation at standard oceanographic depths. The precision depends on the instrument and/or technique used to determine the variable. A standard precision stated as a **standard deviation (σ)** can be determined for each instrument or technique under routine field conditions by making duplicate determinations of the variables for a homogeneous sample of sea water. These standard deviations are given for each cruise under **"GENERAL INFORMATION"** in section III of the data record.

The **measurement error estimate** of a specific observation in this data record, is stated as a multiple of the standard deviation derived as above, and entered in a column immediately to the right of the reported variable. In order to distinguish it from an additional decimal digit, the measurement error estimate is recorded alphabetically, (i.e., $1\sigma = A$, $2\sigma = B$, etc.; in this data record **"A"** is suppressed).

An option is provided with respect to the measurement of the salinity variable. If observed to three decimal digits, the last digit takes the place of the measurement error estimate.

In the past, a number of methods for both manual and machine interpolation have been developed. Studies and comparisons of the several methods have shown that no single method is universally acceptable. The manual methods are the most elaborate and flexible, but often require subjective decisions. In machine interpolation, all the present methods fail to yield acceptable results under some circumstances. Hence, it is considered necessary to qualify interpolated values by stating an **"interpolation error estimate"** derived from the particular interpolation formula used. There are two purposes in stating the error estimates; first, to give an indication of the quality of the interpolated data; second, to allow the oceanographer to redesign his observational procedures in order to reduce interpolation errors in future observations.

The interpolation scheme chosen for the OCEANS II program consists of a combination of two 3-point interpolations using the Lagrangian interpolation polynomial, as recommended by Rattray (1962). A parabola is fitted through three values of a given variable (T , S , O_2) considered as a function of depth. The two interpolation parabolas require a total of four points (observed depths). The middle points are common to both parabolas. The average of the two values obtained from the parabolas at standard depth is taken as the interpolated value, and a function of their difference as an estimate of the interpolation error.

This function combined with the **"measurement error estimate"** comprises the **"combined measurement and interpolation error estimate"**. It is expressed as a multiple of the standard deviation of measurement (σ) under normal routine field conditions by:

CANADIAN OCEANOGRAPHIC DATA CENTRE

1 IDENT. CODE		2 LATITUDE (N=+)		3 LONGITUDE (W=+)		5 DATE		6 TIME		7 DEPTH		9 NO. DEPTHS OBS'D.		VESSEL																																																																																																													
COUNTRY INST.		DEG. MIN. 1/10		DEG. MIN. 1/10		YEAR MONTH DAY		HOURS G.M.T. 1/10		TO BOTTOM				ENTERED BY CHECKED BY																																																																																																													
1 8						19 20 21 22 23 24 25 26 27 28 29 30 31						34 35																																																																																																															
10 WATER		11 WAVES I		12 WAVES II		13 WIND		14 BAROMETER		15 AIR TEMP.		16 WET BULB		17 W.W. CODE		18 CLOUD TYPE		19		20 HOURS AFTER H.W.		21 UNASSIGNED		22 CRUISE REFERENCE NUMBER		23 CONSEC. NUMBER		24 OBS. NO.																																																																																															
COLOUR TRANS.		Dw Dw Pw Hw		Dw Dw Pw Hw		DIR. DIR.		SALINITY		TEMPERATURE		DEPTH OF SAMPLE		7		8		9		10 OXYGEN		13 PO ₄ - P		14 TOTAL - P		15 NO ₃ - N		16 NO ₃ - N		17 SIO ₃ - SI		18 P.H.																																																																																											
HOURS G.M.T. 1/10		1/10		1/10		1/10		d/g		e		e		e		e		e		e		e		e		e		e		e																																																																																													
1		2		3		4		5		6		7		8		9		10		11		12		13		14		15		16		17		18																																																																																									
19		20		21		22		23		24		25		26		27		28		29		30		31		32		33		34		35		36		37		38		39		40		41		42		43		44		45		46		47		48		49		50		51		52		53		54		55		56		57		58		59		60		61		62		63		64		65		66		67		68		69		70		71		72		73		74		75		76		77		78		79		80	

$$\frac{\sigma_i}{\sigma} = \left\{ \frac{(\Delta V_i)^2}{\sigma^2} + \sum_{n=j-2}^{j+1} (\gamma_n)^2 \left(\frac{\sigma_n}{\sigma} \right)^2 \right\}^{1/2}, \text{ where}$$

σ = Standard deviation of the combined error estimates at standard oceanographic depth,
 ΔV_i = the interpolation error estimate of variable "V" at standard oceanographic depth = $1/3 (\bar{V}_{i_1} - V_{i_2})$
 γ = Interpolation polynomial coefficient.

Z_j = Observed depth.

Z_i = Standard oceanographic depth, such that: $Z_{j-2} < Z_{j-1} < Z_i < Z_j < Z_{j+1}$

The integral part of the fraction $\frac{\sigma_i}{\sigma}$, if ≥ 2 , is reported in this Data Record following the interpolated variable. It represents the combined measurement and interpolation error estimate. In order to distinguish it from an additional decimal digit, it is recorded alphabetically (e.g.: 2 as "B", 3 as "C", etc.).

With respect to the interpolated value of the salinity variable if reported to three decimal digits, the interpolation error estimate is given only when $\frac{\sigma_i}{\sigma} \geq 2$ (the salinity is then recorded to two decimal places). If less than 2, the mean obtained from the two interpolation parabolas is reported to three decimal places.

EXPLANATION OF DATA RECORD HEADINGS

MASTER HEADINGS

(1) C-REF-NO	(6) YR	(11) DEPTH	(16) WAVES 1	(21) AIR T	(26) VIS
(2) CONS. NO	(7) MONTH	(12) MXSAMPD	(17) WAVES 2	(22) WET B	(27) STN
(3) LAT	(8) DAY	(13) NO. DPTH	(18) WND-DIR	(23) ww-CODE	
(4) LON	(9) HR	(14) W-COLOR	(19) WND-FCE	(24) CLD-TPE	
(5) MARSD SQ	(10) C/I	(15) W-TRNSP	(20) BARO	(25) CLD-AMT	(28) HW

(1) CRUISE REFERENCE NUMBER:

Assigned by the Institute. Commences with 001 at the beginning of each year (effective Jan. 1, 1963). Prior to that date the CRN was a number designated by CODC.

(2) CONSECUTIVE NUMBER:

Indicates the chronological order in which the stations were occupied.

(3) LATITUDE:

Indicate the position of the platform at the time of observation.

(4) LONGITUDE:

(5) MARSDEN SQUARE: Designates the geographic area code of the observation (see Marsden square chart).

(6) YEAR:

(7) MONTH:

(8) DAY:

(9) HOUR:

The time (Greenwich Mean Time) at which the surface environmental data were recorded. It is reported to tenths of hours (Table 1).
If an "X" precedes the value for HOUR, (prior to Jan. 1, 1963) it indicates that the reported time is doubtful.

(10) COUNTRY/INSTITUTE:

The International Geophysical Year (IGY) Country Code/Institute Code - see Table 11.

(11) DEPTH:

The sounding reported in metres. If corrected, this is stated in the "GENERAL INFORMATION" chapter of section III. Charted depths are preceded by the letter "C".

(12) MAXIMUM

SAMPLING DEPTH: A code to indicate the deepest sampling depth (used for high speed sorting).
00 m - 50 m = 00
51 m - 150 m = 01
151 m - 250 m = 02
etc.

- (13) NUMBER OF DEPTHS: The number of levels observed (this is entered to initiate a computer safety check, guarding against the loss of punch-cards).
- (14) WATER COLOUR: The Forel-Ule Code (see table 2 and NOTE under FIELD "15" below).
- (15) WATER TRANSPARENCY: The depth in metres at which a Secchi disc (white disc, 30 cm. in diameter) just disappears from view, or the optical density expressed in percentage;

NOTE: The "GENERAL INFORMATION" chapter in section III of the data record will state which method was used.

- (16) WAVES 1
($d_w d_w P_w H_w$ -code): The direction, period and height of the **wind-propagated** wave system. (See Tables 3, 4 and 5). Ref: World Meteorological Organization Codes 0885, 3155, 1555.
- (17) WAVES 2
($d_w d_w P_w H_w$ -code): The direction, period and height of the predominant **non-wind-propagated** wave system. (See Tables 3, 4 and 5). Ref: World Meteorological Organization Codes 0885, 3155, 1555.
- (18) WIND DIRECTION: The true direction to the nearest 10 degrees from which the wind is blowing (wind direction 990 means:—wind variable or direction unknown).
- (19) WIND FORCE
(WND-FCE): Beaufort notation (See Table 6).
- WIND SPEED
(WND-SPD): Anemometer reading reported in metres per second. Instrument height reported in "GENERAL INFORMATION" chapter of section III.
- (20) BAROMETER: The barometric pressure reported in millibars: the "GENERAL INFORMATION" chapter in Section III of the data record will state the type of instrument used.
- (21) AIR TEMPERATURE: In degrees Celsius.
- (22) WET BULB: In degrees Celsius.
- (23) ww CODE: Present Weather Code (See Table 7). Ref: WMO Code 4677
- (24) CLOUD TYPE: The type of predominating clouds (See Table 8). Ref: WMO Code 0500.
- (25) CLOUD AMOUNT: The sky coverage in eighths (See Table 9) Ref: WMO Code 2700
- (26) VISIBILITY: Visibility at the surface (See Table 10). Ref: WMO Code 4300.
- (27) STATION: A station reference number, assigned by the institute prior to, or during the survey.
- (28) HOURS AFTER HIGH WATER: Indicates the state of the tide for nearshore observations.

OBSERVED DATA HEADINGS

(1) GMT	(2) DEPTH	(3) TEMP	(4) SAL	(5) OXYGEN	(6) SGMT
(7) SOUND	(8) PO_4	(9) -P-	(10) NO_2	(11) NO_3	(12) SiO_2
					(13) pH.

NOTE: Headings (1) to (7) will always be present. Headings (8) to (13) appear only when one or more additional chemical entries were made.

(1) G.M.T.: The Greenwich Mean Time of (in-situ) thermometer inversion and sea water sample collection.

When a multiple cast was initiated prior to and continued after midnight, the times indicated are uninterrupted by the change of day and appear beyond 24.0 hours. This will be accompanied by a statement: "MULTIPLE CAST CONTINUED NEXT DAY", which is printed following the last level of observed values.

(2) DEPTH: The depth in metres at the reversal time of deepest cast.

(3) TEMPERATURE: Temperatures from deepsea reversing thermometers, read to 0.01°C . Surface temperature measurement procedures are described in the chapter "OBSERVATION PROCEDURES" of section I, and/or the "GENERAL INFORMATION" chapter of section III. An alphabetical character following the temperature value represents the measurement error estimate referred to in the INTRODUCTION to this section.

(4) SALINITY: Salinity as defined by: $S = 0.03 + 1.805 \text{ C1\%}$, reported in:
 a. 1/100 parts per 1000, or
 b. 1/1000 parts per 1000.

In case a: an alphabetical character following the value is the measurement error estimate as referred to under (3).

In case b: no error estimate indication is provided for, but an additional decimal digit takes its place.

(5) OXYGEN: The concentration of dissolved oxygen expressed in millilitres per litre to 2 decimal places. An alphabetical character following the value is the measurement error estimate as referred to under (3).

(6) SIGMA-T: The specific gravity anomaly as defined by: $(\text{Specific gravity} - 1) \times 10^3$ (e.g., σ_t reported as 2456, reads 24.56, and corresponds to a specific gravity of 1.02456).

(7) SOUND: The sound velocity is reported in m/sec. to 1 decimal place (e.g., 1437.9 m/sec.). The computation is carried out using Wilson's formula (1960), expressed in terms of temperature, salinity and total pressure.

- (8) PO_4 Phosphate-Phosphorus reported to hundredths of microgram-atoms per litre.
- (9) -P- Total Phosphorus reported to hundredths of microgram-atoms per litre.
- (10) NO_2 Nitrite-Nitrogen reported to hundredths of microgram-atoms per litre — No dissolved nitrogen included —
- (11) NO_3 Nitrate-Nitrogen reported to tenths of microgram-atoms per litre.
- (12) SiO_2 Silicate-Silicon reported in whole microgram-atoms per litre.
- (13) pH The pH value.

NOTE: "TRC" (trace) is reported when a chemical entry has a value less than the standard deviation of measurement for that particular variable.

INTERPOLATED DATA HEADINGS

- | | | | | | |
|-------------|------------|----------|------------|----------|-----------|
| (1) DEPTH | (2) TEMP | (3) SAL | (4) OXYGEN | (5) SGMT | (6) SOUND |
| (7) DELTA-D | (8) POT-EN | (9) SVA. | | | |

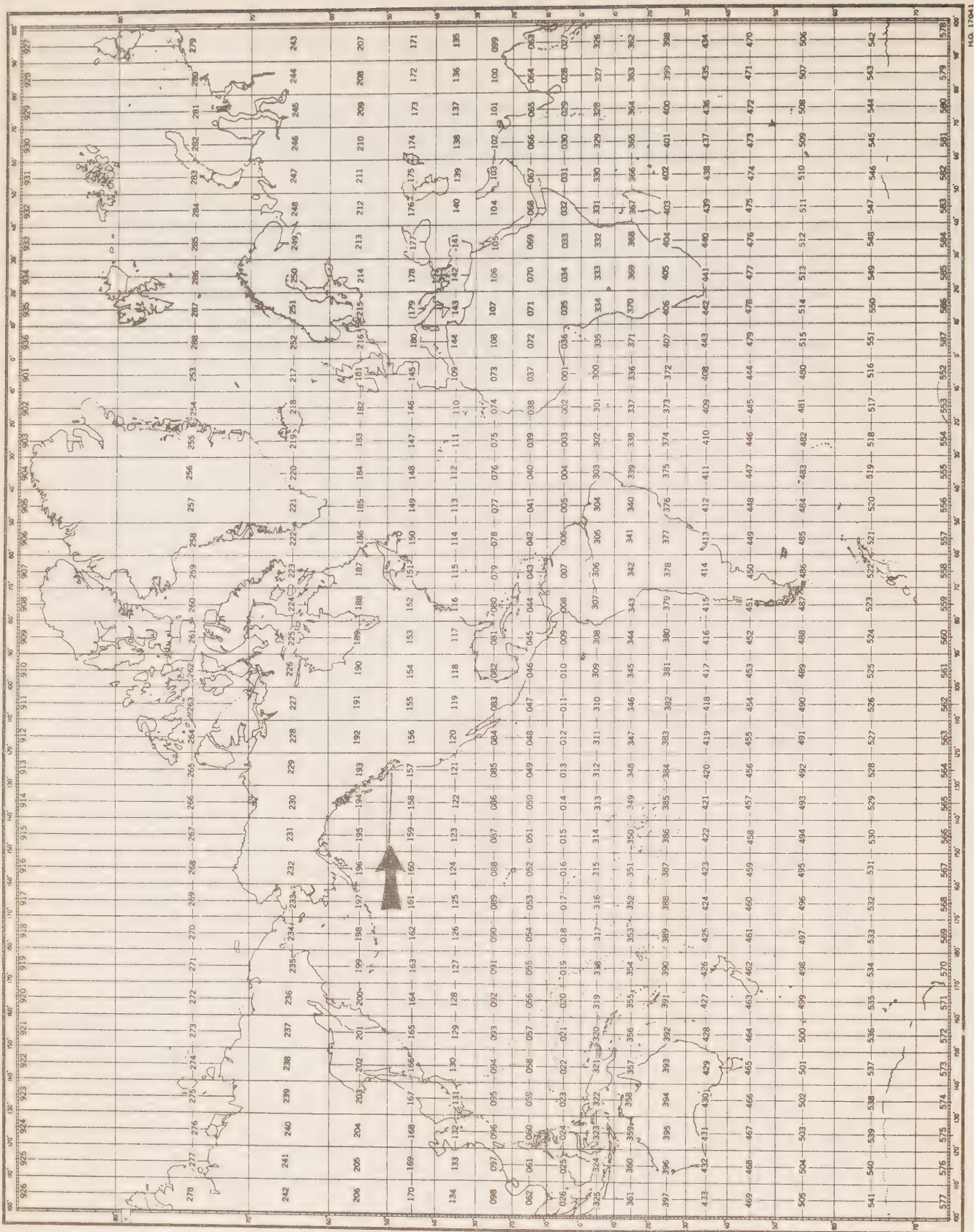
- (1) DEPTH: Standard Oceanographic Depth in whole metres, as well as additional depths: 125, 175, 225, 3500, 4500, 5500, 6500, 7500, 8500, 9500.
- (2) TEMPERATURE: Interpolated value at standard depth, followed by the combined measurement and interpolation error estimate (see "INTRODUCTION" to section II of the data record).
- (3) SALINITY: A. The reported salinity values are measured to three decimal places.
 (i) the interpolation error estimate is less than twice the standard deviation of measurement
 —the interpolated value is reported to three decimal places (e.g., 30.139).
 (ii) the interpolation error estimate is equal to or greater than twice the standard deviation of measurement.
 —the interpolated value is reported to two decimal places, and followed by the interpolation error estimate (e.g., 29.23 C).
 B. The reported salinity values are measured to two decimal places and followed by the measurement error estimate.
 —the interpolated value is reported to two decimal places, and followed by the combined measurement and interpolation error estimate (e.g., 30.59 B).
- (4) OXYGEN: Interpolated value at standard depth, followed by the combined measurement and interpolation error estimate (see "Introduction" to section II of the data record).

- (5) SIGMA-T: Computed from temperature and salinity values at standard oceanographic depth.
- (6) SOUND VELOCITY: Computed from temperature, salinity and total pressure values at standard oceanographic depth, using Wilson's formula (1960).
- (7) DELTA-D: The geo-potential anomaly as defined by:
- $$\Delta D = \int_0^P \delta dp$$
- ΔD is expressed in dynamic metres (10^5 ergs/gram) and recorded to three decimal places (e.g., 2.345 dyn. metres).
- (8) POTENTIAL ENERGY ANOMALY: The Potential energy anomaly χ as defined by:
- $$\chi = 1/g \int_0^P p \delta dp = \int_0^Z \rho p \delta dz$$
- χ is expressed in units of 10^8 ergs/cm² and recorded to two decimal places (e.g., 116.44).
- (9) SPECIFIC VOLUME ANOMALY: The specific volume anomaly as defined by:
- $$\delta = \alpha - \alpha_{35.0.P}$$
- δ is expressed in ml/gr, and conventionally reported as $10^5 \delta$, to one decimal place (i.e., δ reported as 1234, reads 123.4, and corresponds to a specific volume anomaly of 0.001234 ml/gr.).

SPECIAL CHARACTERS

‡ (Record mark): is used to indicate inconsistencies which are printed in an area below the "Observed Data". A corresponding record mark at the extreme left hand side indicates the level at which the inconsistency occurs

* (Asterisk): this character may occur in the **interpolated** portion of the data record. It is printed at the extreme left hand side of the page, when three or more standard depth levels fall within any one **observed depth interval**. The **third**, and all consequent levels are preceded by the asterisk to indicate that more than **two** machine interpolations were carried out, utilizing the same set of interpolation parabolas. The asterisk will also appear when the last standard depth is an extrapolation and there are at least two interpolations between the last two observed depths.



MARS DEN SQUARE CHART

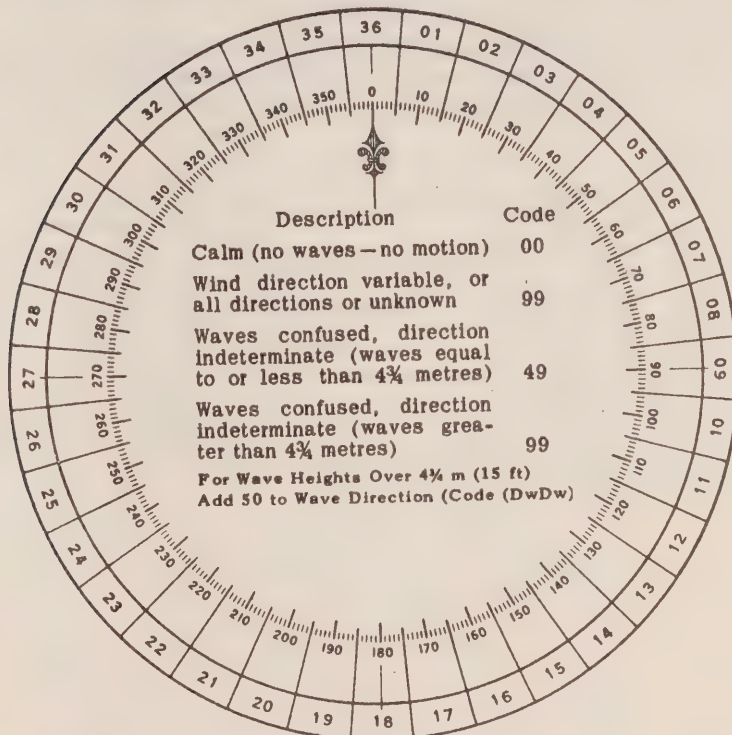
Table 1
CONVERSION
MINUTES TO $\frac{1}{4}$ HRS.

Minutes	Tenths Hrs.
00-03	0
04-08	1
09-15	2
16-20	3
21-27	4
28-32	5
33-39	6
40-44	7
45-51	8
52-56	9
57-59	0 (next HR.)

Table 2
WATER COLOR CODE
Based on Percentage Yellow

Code:	Description
00	Deep Blue
10	Blue
20	Greenish Blue
30	Bluish Green
40	Green
50	Light Green
60	Yellowish Green
70	Yellow Green
80	Green Yellow
90	Greenish Yellow
99	Yellow

Table 3. DIRECTION CODE (dd)



NOTE:

Always use the true direction from which the wind is blowing, or the direction from which Waves I (sea), or Waves II (swell) come.

Table 4. PERIOD OF THE WAVES (Pw)
(Measure to the Nearest Second)

Code:	Period in Seconds:	Code:	Period in Seconds:
2	5 sec. or less	8	16 or 17 sec.
3	6 or 7 sec.	9	18 or 19 sec.
4	8 or 9 sec.	0	20 or 21 sec.
5	10 or 11 sec.	1	Over 21 sec.
6	12 or 13 sec.	X	Calm, or period not determined
7	14 or 15 sec.		

Table 5. HEIGHT OF THE WAVES (Hw)

- The average value of the wave height (vertical distance between trough and crest) is reported, as obtained from the larger well formed waves of the wave system being observed.
- Each code figure provides for reporting a range of heights. For example: 1 = $\frac{1}{4}$ m (1 ft) to $\frac{3}{4}$ m ($2\frac{1}{2}$ ft); 5 = $2\frac{1}{4}$ m (7 ft) to $2\frac{3}{4}$ m (9 ft); 9 = $4\frac{1}{4}$ m ($13\frac{1}{2}$ ft) to $4\frac{3}{4}$ m (15 ft), etc.
- If a wave height comes exactly midway between the heights corresponding to two code figures, the lower code figure is reported; e.g. a height of $2\frac{3}{4}$ m is reported by code figure 5.

Code			Code
0	Less than ¼ m (1 ft)		0 5 m (16 ft)
1	½ m (1½ ft)		1 5½ m (17½ ft)
2	1 m (3 ft)		2 6 m (19 ft)
3	1½ m (5 ft)	Add	3 6½ m (21 ft)
4	2 m (6½ ft)	50	4 7 m (22½ ft)
5	2½ m (8 ft)	to	5 7½ m (24 ft)
6	3 m (9½ ft)	Dw Dw	6 8 m (25½ ft)
7	3½ m (11 ft)		7 8½ m (27 ft)
8	4 m (13 ft)		8 9 m (29 ft)
9	4½ m (14 ft)		9 9½ m (30½ ft) or more
x	Height not determined		

Add
50
to
Dw Dw

Table 6. WIND FORCE CODE

The Beaufort force of the wind is estimated from the appearance of the sea surface, according to the table below. This table is only intended as a guide to show roughly what may be expected on the open sea, remote from land. Factors which must be taken into account are the "lag" effect between the wind increasing and the sea getting up; and the influence of "fetch", depth, swell, heavy rain and tide effect on the appearance of the sea. Estimation of the wind force by this method becomes unreliable in shallow water or when close inshore, owing to the tidal effect and the shelter provided by the land.

Code	Appearance of sea if fetch and duration of the blow have been sufficient to develop the sea fully	Description
00	Sea like a mirror	Calm
01	Ripples with the appearance of scales are formed, but without foam crests.	Light Air
02	Small wavelets; crests have a glassy appearance and do not break.	Light Breeze
03	Large wavelets; crests begin to break; foam of glassy appearance; perhaps scattered white horses.	Gentle Breeze
04	Small waves, becoming longer; fairly frequent white horses.	Moderate breeze
05	Moderate waves; many white horses are formed (chance of some spray)	Fresh Breeze
06	Large waves; white foam crests everywhere (probably some spray)	Strong Breeze
07	Sea heaps up and white foam from breaking waves begins to be blown in streaks along the direction of the wind.	Near Gale
08	Moderately high waves; edges of crests begin to break into the spindrift; foam is blown in well-marked streaks along the direction of the wind.	Gale
09	High waves; dense streaks of foam along wind; crests begin to topple, tumble and roll over; spray may affect visibility.	Strong Gale
10	Very high waves with long overhanging crests; foam in great patches blown in dense white streaks along wind; sea surface takes a white appearance; tumbling becomes heavy and shock-like; visibility affected.	Storm
11	Exceptionally high waves (medium sized ships may be lost to view behind waves); sea covered with long white patches of foam lying along the wind; everywhere edges of crests are blown into froth; visibility affected.	Violent Storm
12	Air is filled with foam and spray; sea completely white with driving spray; visibility seriously affected.	Hurricane

Table 7. PRESENT WEATHER

W.W. CODE

NO PRECIPITATION ON STATION AT TIME OF OBSERVATION

Code figure ww			
No meteors except photometeors	00	Cloud development not observed or not observable	
	01	Clouds generally dissolving or becoming less developed	
	02	State of sky on the whole unchanged	
	03	Clouds generally forming or developing	
Haze, dust, sand or smoke	04	Visibility reduced by smoke, e.g. veldt or forest fires, industrial smoke or volcanic ashes	
	05	Haze	
	06	Widespread dust in suspension in the air, not raised by wind at or near the station at the time of observation	
	07	Dust or sand raised by wind at or near the station at the time of observation, but no well developed dust whirl(s) or sand whirl(s), and no duststorm or sandstorm seen	
	08	Well developed dust whirl(s) or sand whirl(s) seen at or near the station during the preceding hour or at the time of observation, but no dustorm or sandstorm	
	09	Duststorm or sandstorm within sight at the time of observation, or at the station during the preceding hour	
	10	Mist	
	11	{ Patches of } shallow fog or ice fog at the station, whether on land or sea, not	
	12		More of less } deeper than about 2 metres on continuous land or 10 metres at sea
	13	Lightning visible, no thunder heard	
	14	Precipitation within sight, not reaching the ground or the surface of the sea	
	15	Precipitation within sight, reaching the ground or the surface of the sea, but distant (i.e. estimated to be more than 5 km) from the station	
	16	Precipitation within sight, reaching the ground or the surface of the sea, near to, but not at the station	
	17	Thunderstorm, but no precepitation at the time of observation	
	18	Squalls	{ at or within sight of the station during the preceding hour or at the time of observation
	19	Funnel clouds	

ww = 20 - 29	Precipitation, fog, ice fog or thunderstorm at the station during the preceding hour but not at the time of observation	
20	Drizzle (not freezing) or snow grains	} not falling as shower(s)
21	Rain (not freezing)	
22	Snow	
23	Rain and snow or ice pellets, type (a)	
24	Freezing drizzle or freezing rain	
25	Shower(s) of rain	
26	Shower(s) of snow, or of rain and snow	
27	Shower(s) of hail, or of rain and hail	
28	Fog or ice fog	
29	Thunderstorm (with or without precipitation)	
ww = 30 - 39	Duststorm, sandstorm, drifting or blowing snow	
30	{ Slight or moderate duststorm or sandstorm	- has decreased during the preceding hour
31		- no appreciable change during the preceding hour
32		- has begun or has increased during the preceding hour
33	{ Severe duststorm or sandstorm	- has decreased during the preceding hour
34		- no appreciable change during the preceding hour
35		- has begun or has increased during the preceding hour
36	Slight or moderate blowing snow	} generally low (below eye level)
37	Heavy drifting snow	
38	Slight or moderate blowing snow	} generally high (above eye level)
39	Heavy blowing snow	
ww = 40 - 49	Fog or ice fog at the time of observation	
40	Fog or ice fog at a distance at the time of observation, but not at the station during the preceding hour, the fog or ice fog extending to a level above that of the observer	
41	Fog or ice fog in patches	
42	Fog or ice fog, sky visible	} has become thinner during the preceding hour
43	Fog or ice fog, sky invisible	
44	Fog or ice fog, sky visible	} no appreciable change during the preceding hour
45	Fog or ice fog, sky invisible	
46	Fog or ice fog, sky visible	} has begun or has become thicker during the preceding hour
47	Fog or ice fog, sky invisible	
48	Fog, depositing rime, sky visible	
49	Fog, depositing rime, sky invisible	

NO PRECIPITATION ON STATION AT TIME OF OBSERVATION

PRECIPITATION ON STATION AT TIME OF OBSERVATION

ww = 50 - 59 Drizzle

50	Drizzle, not freezing, intermittent	} slight at time of observation
51	Drizzle, not freezing, continuous	
52	Drizzle, not freezing, intermittent	} moderate at time of observation
53	Drizzle, not freezing, continuous	
54	Drizzle, not freezing, intermittent	} heavy (dense) at time of observation
55	Drizzle, not freezing, continuous	
56	Drizzle, freezing, slight	
57	Drizzle, freezing, moderate or heavy (dense)	
58	Drizzle and rain, slight	
59	Drizzle and rain, moderate or heavy	

ww = 60 - 69 Rain

60	Rain, not freezing, intermittent	} slight at time of observation
61	Rain, not freezing, continuous	
62	Rain, not freezing, intermittent	} moderate at time of observation
63	Rain, not freezing, continuous	
64	Rain, not freezing, intermittent	} heavy at time of observation
65	Rain, not freezing, continuous	
66	Rain, freezing, slight	
67	Rain, freezing, moderate or heavy	
68	Rain or drizzle and snow, slight	
69	Rain or drizzle and snow, moderate or heavy	

70 - 79 Solid precipitation not in showers

70	Intermittent fall of snow flakes	} slight at time of observation
71	Continuous fall of snow flakes	
72	Intermittent fall of snow flakes	} moderate at time of observation
73	Continuous fall of snow flakes	
74	Intermittent fall of snow flakes	} heavy at time of observation
75	Continuous fall of snow flakes	
76	Ice prisms (with or without fog)	
77	Snow grains (with or without fog)	
78	Isolated starlike snow crystals (with or without fog)	
79	Ice pellets, type (a)	

ww = 80 - 99 Showery precipitation, or precipitation with current or recent thunderstorm

80	Rain shower(s), slight	
81	Rain shower(s), moderate or heavy	
82	Rain shower(s), violent	
83	Shower(s) of rain and snow mixed, slight	
84	Shower(s) of rain and snow mixed, moderate or heavy	
85	Snow shower(s), slight	
86	Snow shower(s), moderate or heavy	
87	Shower(s) of snow pellets or ice pellets, type (b), with or without rain	} - slight
88	or rain and snow mixed	
89	Shower(s) of hail, with or without rain or rain and snow mixed, not associated with thunder	} - moderate or heavy
90		
91	Slight rain at time of observation	
92	Moderate or heavy rain at time of observation	} thunderstorm during the preceding hour but not at time of observation
93	Slight snow, or rain and snow mixed or hail at time of observation	
94	Moderate or heavy snow, or rain and snow mixed or hail at time of observation	
95	Thunderstorm, slight or moderate, without hail, but with rain and/or snow at time of observation	
96	Thunderstorm, slight or moderate, with hail at time of observation	
97	Thunderstorm, heavy, without hail, but with rain and/or snow at time of observation	} thunderstorm at time of observation
98	Thunderstorm, combined with duststorm or sandstorm at time of observation	
99	Thunderstorm, heavy, with hail at time of observation	

PRECIPITATION ON STATION AT TIME OF OBSERVATION

Table 8. CLOUD TYPE CODE

Code	Cloud Type	Code	Cloud Type
0	Cirrus Ci	5	Nimbostratus Ns
1	Cirrocumulus Cc	6	Stratocumulus Sc
2	Cirrostratus Cs	7	Stratus St
3	Alto cumulus Ac	8	Cumulus Cu
4	Altostratus As	9	Cumulonimbus Cb
X	Cloud not visible owing to darkness, fog, duststorm, sandstorm, or other analogous phenomena		

Table 9. CLOUD AMOUNT CODE

Code	Cloud Cover	Code	Cloud Cover
0	0	6	6 oktas
1	1 okta or less, but not zero	7	7 oktas or more, but not 8 oktas
2	2 oktas	8	8 oktas
3	3 oktas	9	Sky obscured, or cloud amount cannot be estimated
4	4 oktas		
5	5 oktas		

Note: 1 okta = $\frac{1}{8}$ of the sky covered

Table 10. VISIBILITY

Code	Estimate of hor. Visibility
0	Less than 50 metres (less than 55 yards)
1	50-200 metres (approx. 55-220 yards)
2	200-500 metres (approx. 220-550 yards)
3	500-1,000 metres (approx. 550 yards- $\frac{1}{2}$ n.m.)
4	1-2 km (approx. $\frac{3}{4}$ -1 n.m.)
5	2-4 km (approx. 1-2 n.m.)
6	4-10 km (approx. 2-6 n.m.)
7	10-20 km (approx. 6-12 n.m.)
8	20-50 km (approx. 12-30 n.m.)
9	50 km or more (30 n.m. or more)

Note: n.m. = nautical mile

Table 11

CCO Institute Code

01. Atlantic Oceanographic Group.
02. Pacific Oceanographic Group.
03. Biological Station, St. Andrews, N.B.
04. Arctic Biological Station, St. Anne de Bellevue, P.Q.
05. Biological Station, St. John's Nfld.
06. Station de Biologie Marine, Grande Riviere, P.Q.
07. Canadian Hydrographic Service.
08. Naval Research Establishment, Dartmouth, N.S.
09. Pacific Naval Laboratory, Esquimalt, B.C.
10. Bedford Institute of Oceanography.
11. Polar Continental Shelf Project.
12. Great Lakes Institute.
13. Inland Region, Oceanographic Research, Ottawa.
14. Institute of Oceanography, Dalhousie University.

SECTION III

Serial oceanographic data

GENERAL INFORMATION

Institute: Pacific Oceanographic Group,
Nanaimo, B. C.

Observation Platform: CCGS "St. Catharines"

Vessel's Cruising Speed: 13 knots

Total Number of Stations Occupied: 19

Anemometer Height Above Sea Level: 19

Water transparency: Secchi Disc.

Barometer readings: Aneroid Barometer (corrected)

Air temperature: Sling Psychrometer

Wet bulb temperature: Sling Psychrometer

Surface sea water temperature: Bucket sample (deck thermometer)

Depth to bottom: U. S. Coast and Geodetic Survey
Chart 8500

The following Standard Deviations were used to express both measurement and interpolation error estimates:

Temperature	0.02
	(001 - 004 = 0.005
Salinity Consec. Nos.	(005 - 009 = 0.01
	(010 - 013 = 0.02
	(014 - 019 = 0.003
Oxygen	0.03

C-REF-NO 001 YR 1965 DEPTH 131 WAVES 1 00XX AIR T 04.9 VIS 7
 CONS. NO 001 MONTH 1 MXSAMPD 01 WAVES 2 2723 WET B 04.4 STN 001
 LAT 48-33 N DAY 23 NO.DPTH 8 WND-DIR 990 WW-CODE 02
 LON 125-31 W HR 01.0 W-COLOR 10 WND-SPD 01 CLD-TPE 0
 MARSD SQ 157 C/I 1802 W-TRNSP 04 BARO 1020.0 CLD-AMT 2 HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
010	0000	076 B	31340		2448	14766
010	0010	0829	31761		2471	14800
010	0020	0850	32173		2501	14815
010	0030	0874	32368		2512	14828
010	0050	0842	32512		2528	14821
010	0075	0852	33013		2566	14836
010	0100	0839	33154		2579	14837
010	0125	0836	33227		2585	14840

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0760 B	31340		2448	14766	0000	00000	3459
0010	0829	31761		2471	14800	0034	00002	3240
0020	0850	32173		2501	14815	0065	00006	2965
0030	0874	32368		2512	14828	0094	00014	2856
0050	0842	32512		2528	14821	0150	00037	2706
0075	0852	33013		2566	14836	0214	00077	2352
0100	0839	33154		2579	14836	0271	00128	2233
0125	0836	33227		2585	14840	0327	00192	2179

C-REF-NO 001	YR 1965	DEPTH C 1298	WAVES 1 0522	AIR T 05.5	VIS 7
CONS. NO 002	MONTH 1	MXSAMPD 12	WAVES 2 2723	WET B 04.9	STN 003
LAT 48-42 N	DAY 23	NO.DPTH 19	WND-DIR 050	WW-CODE 02	
LON 126-40 W	HR 05.4	W-COLOR	WND-SPD 08	CLD-TPE X	
MARKSD SQ 157	C/I 1802	W-TRNSP	BARO 1017.0	CLD-AMT 9	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
054	0000	089 B	31990		2480	14824
054	0010	0873	31978		2482	14819
054	0020	0887	32138		2492	14828
054	0030	0886	32364		2510	14833
054	0050	0865	32329		2510	14828
054	0075	0776	32315		2522	14797
054	0100	0830	32975		2566	14831
054	0125	0819 B	33625		2619	14839
054	0150	0774	33715		2632	14827
054	0175	0760	33823		2643	14827
054	0200	0729	33888		2652	14820
054	0250	0694	33953		2662	14815
054	0300	0650	33986		2671	14807
054	0400	0579	34031		2684	14795
059	0500	0517	34048		2692	14787
059	0600	0476	34164		2706	14788
059	0800	0410	34305		2725	14796
059	1000	0350	34405		2739	14805
059	1200	0306	34468		2748	14820

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0890 B	31990		2480	14824	0000	00000	3155
0010	0873	31978		2482	14819	0032	00002	3141
0020	0887	32138		2492	14828	0063	00006	3044
0030	0886	32364		2510	14833	0093	00014	2876
0050	0865	32329		2510	14828	0150	00038	2875
0075	0776	32315		2522	14797	0221	00083	2764
0100	0830	32975		2566	14831	0286	00140	2353
0125	0819 B	33625		2619	14839	0339	00200	1859
0150	0774	33715		2632	14827	0384	00264	1732
0175	0760	33823		2643	14827	0426	00335	1636
0200	0729	33888		2652	14820	0466	00412	1549
0225	0710	33928		2658	14817	0505	00495	1497
0250	0694	33953		2662	14815	0542	00586	1461
0300	0650	33986		2671	14807	0614	00788	1385
0400	0579	34031		2684	14795	0748	01267	1273
0500	0517	34048		2692	14787	0872	01841	1196
0600	0476	34164		2706	14788	0987	02485	1071

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0700	0441	34245		2716	14791	1091	03175	0979
0800	0410	34305		2725	14795	1186	03908	0907
1000	0350	34405		2739	14805	1357	05476	0780
1200	0306	34468		2748	14820	1506	07161	0697

C-REF-NO 001	YR 1965	DEPTH C 2496	WAVES 1 08XX	AIR T 06.1	VIS 7
CONS. NO 003	MONTH 1	MXSAMPD 23	WAVES 2 27XX	WET B 04.4	STN 004
LAT 48-45 N	DAY 23	NO.DPTH 22	WND-DIR 080	WW-CODE 02	
LON 127-40 W	HR 10.1	W-COLOR	WND-SPD 09	CLD-TPE 6	
MARSD SQ 157	C/I 1802	W-TRNSP	BARO 1011.0	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
101	0000	074 B	32330		2529	14771
101	0009	0686 B	32314		2535	14751
101	0018	0687 B	32317		2535	14753
101	0028	0688	32317		2535	14755
101	0046	0693	32407		2541	14761
101	0069	0736	32995		2581	14790
101	0093	0753	33495		2618	14807
101	0116	0753	33739		2637	14814
101	0139	0739	33847		2648	14813
101	0162	0720	33905		2655	14811
101	0185	0708	33934		2659	14810
101	0232	0669	33965		2667	14803
101	0278	0633	33992		2674	14796
101	0376	0561	34038		2686	14784
108	0437	0535	34085		2693	14784
108	0536	0482	34151		2704	14780
108	0740	0429	34282		2721	14793
108	0952	0369	34361		2733	14804
108	1134	0318	34430		2744	14814
108	1400	0266	34499		2754	14837
108	1916	0204 B	34585		2766	14899
108	2336	0176	34626		2771	14959

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0740 B	32330		2529	14771	0000	00000	2694
0010	0685 B	32314		2535	14751	0027	00001	2637
0020	0687 B	32316		2535	14753	0053	00005	2640
0030	0688	32316		2535	14755	0080	00012	2641
0050	0700	3249 C		2547	14766	0132	00033	2527
0075	0742	33137		2592	14795	0190	00070	2106
0100	0755	33589		2625	14810	0239	00114	1791
0125	0749	33792		2642	14814	0282	00163	1635
0150	0730	33880		2652	14812	0322	00220	1548
0175	0713	33924		2657	14810	0361	00284	1497
0200	0696	33946		2662	14808	0398	00355	1462
0225	0675	33962		2666	14804	0435	00435	1426
0250	0655	33976		2670	14800	0470	00521	1391
0300	0615	34001		2677	14793	0539	00714	1328

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0400	0550	34056		2689	14784	0667	01173	1219
0500	0501	34128		2700	14781	0785	01716	1117
0600	0462 B	34195		2710	14782	0893	02327	1030
0700	0437	34259		2718	14789	0994	02998	0964
0800	0412	34307		2724	14796	1089	03727	0908
1000	0355	34380		2736	14807	1262	05320	0804
1200	0303	34450		2747	14819	1415	07043	0707
1500	0251	34520		2757	14848	1616	09813	0613
2000	0194	34598		2768	14909	1901	14896	0511

C-REF-NO 001	YR 1965	DEPTH C 2532	WAVES 1 08XX	AIR T 05.5	VIS 8
CONS. NO 004	MONTH 1	MXSAMPD 04	WAVES 2 27XX	WET B 03.3	STN 005
LAT 48-50 N	DAY 23	NO.DPTH 14	WND-DIR 080	WW-CODE 02	
LON 128-40 W	HR 14.8	W-COLOR	WND-SPD 10	CLD-TPE 6	
MARSD SQ 157	C/I 1802	W-TRNSP	BARO 1004.0	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
148	0000	066 B	32420		2546	14741
148	0010	0687	32401		2541	14753
148	0020	0688	32402		2541	14755
148	0030	0689	32407		2542	14757
148	0050	0694	32415		2542	14762
148	0075	0698	33075		2593	14777
148	0100	0690	33398		2619	14782
148	0125	0668	33628		2640	14780
148	0150	0670	33839		2657	14788
148	0175	0648	33870		2662	14784
148	0200	0624	33896		2667	14779
148	0250	0602	33986		2677	14779
148	0300	0567	34025		2685	14774
148	0400	0522	34117		2697	14773

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0660 B	32420		2546	14741	0000	00000	2525
0010	0687	32401		2541	14753	0026	00001	2574
0020	0688	32402		2541	14755	0052	00005	2576
0030	0689	32407		2542	14757	0077	00012	2575
0050	0694	32415		2542	14762	0129	00033	2578
0075	0698	33075		2593	14777	0188	00070	2094
0100	0690	33398		2619	14782	0238	00114	1846
0125	0668	33628		2640	14780	0282	00165	1650
0150	0670	33839		2657	14788	0321	00220	1499
0175	0648	33870		2662	14784	0359	00282	1451
0200	0624	33896		2667	14779	0395	00352	1405
0225	0612	33941		2672	14778	0429	00427	1359
0250	0602	33986		2677	14779	0463	00510	1316
0300	0567	34025		2685	14774	0528	00692	1250
0400	0522	34117		2697	14773	0648	01123	1139

C-REF-NO 001	YR 1965	DEPTH C 4206	WAVES 1 2422	AIR T 07.2	VIS 7
CONS. NO 005	MONTH 1	MXSAMPD 04	WAVES 2 2723	WET B 06.6	STN 101
LAT 50-06 N	DAY 26	NO.DPTH 14	WND-DIR 240	WW-CODE 02	
LON 144-50 W	HR 19.1	W-COLOR 10	WND-SPD 09	CLD-TPE 7	
MARSD SQ 195	C/I 1802	W-TRNSP 18	BARO 996.0	CLD-AMT 4	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
191	0000	049 B	3280	740	2597	14677
191	0010	0468	3279	742	2598	14669
191	0019	0468	3280	739	2599	14671
191	0029	0467	3280	736	2599	14672
191	0048	0466	3279	737	2598	14674
191	0072	0468	3279	730	2598	14679
191	0096	0466	3279	723	2598	14682
191	0121	0461	3282	684	2601	14685
191	0145	0384	3323	578	2642	14662
191	0169	0341	3355	418	2671	14652
191	0193	0330	3367	347	2682	14653
191	0242	0338	3381	220	2692	14666
191	0291	0346	3390	148	2699	14679
191	0391	0354	3402	113	2708	14700

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0490 B	3280	740	2597	14677	0000	00000	2047
0010	0468	3279	742	2598	14669	0021	00001	2033
0020	0468	3280	739	2599	14671	0041	00004	2026
0030	0467	3280	736	2599	14672	0061	00009	2026
0050	0466	3279	737	2598	14675	0102	00026	2035
0075	0468	3279	730	2598	14680	0154	00059	2039
0100	0468	3278	720	2598	14684	0205	00105	2048
0125	0449 B	3288	671	2607	14681	0255	00163	1957
0150	0372	3331	543 B	2649	14659	0300	00225	1559
0175	0336	3359	396	2675	14651	0336	00285	1315
0200	0330	3370	326	2684	14654	0368	00347	1231
0225	0333	3377	260	2690	14661	0398	00413	1178
0250	0339	3383	205	2694	14668	0428	00484	1145
0300	0346	3392	133	2701	14681	0484	00643	1083
0400	0354	3402	119	2708	14702	0590	01023	1023

C-REF-NO 001	YR 1965	DEPTH C 4206	WAVES 1 1821	AIR T	VIS 2
CONS. NO 006	MONTH 1	MXSAMPD 42	WAVES 2 2223	WET B	STN 102
LAT 50-00 N	DAY 29	NO.DPTH 27	WND-DIR 180	WW-CODE 45	
LON 145-02 W	HR 19.3	W-COLOR 10	WND-SPD 04	CLD-TPE X	
MARSD SQ 195	C/I 1802	W-TRNSP 19	BARO 1004.0	CLD-AMT 9	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
193	0000	050 B	3279	717	2595	14681
193	0010	0464	3280	723 B	2600	14667
193	0020	0465	3279	713 B	2599	14669
193	0030	0464	3280	718 B	2600	14671
193	0050	0464	3280	718 B	2600	14674
193	0075	0464 B	3280	700 B	2600	14678
193	0100	0465	3280	702 B	2599	14683
193	0125	0461 B	3281	660 B	2601	14685
193	0150	0380	3320	546 B	2640	14661
193	0175	0337	3358	395 B	2674	14651
193	0200	0330	3372	296 B	2686	14654
193	0250	0343	3386	163 B	2696	14670
193	0300	0350	3394	121	2702	14682
193	0400	0362	3407	107	2711	14706
193	0500	0352	3415	071	2718	14719
193	0600	0341	3422	077 B	2725	14732
193	0800	0310	3433	071 B	2736	14753
204	0990	0279	3441	078 B	2746	14773
204	1188	0258	3446	076 B	2751	14798
204	1486	0231		072 B		
204	1983	0194	3460	132	2768	14906
204	2482	0173	3464	194	2773	14983
204	2981	0156	3467	256	2776	15062
204	3480	0152	3468	296	2777	15148
204	3980	0150	3468	319	2777	15235
204	4180	0152	3469	321	2778	15271
204	4182	0153	3470	338	2779	15272

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0500 B	3279	717	2595	14681	0000	00000	2065
0010	0464	3280	723 B	2600	14667	0021	00001	2021
0020	0465	3279	713 B	2599	14669	0041	00004	2031
0030	0464	3280	718 B	2600	14671	0061	00009	2023
0050	0464	3280	718 B	2600	14674	0102	00026	2025
0075	0464 B	3280	700 B	2600	14678	0153	00059	2027
0100	0465	3280	702 B	2599	14683	0204	00105	2030
0125	0461 B	3281	660 B	2601	14685	0255	00164	2020
0150	0380	3320	546 B	2640	14660	0301	00228	1648

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0175	0337	3358	395 B	2674	14651	0339	00290	1323
0200	0330	3372	296 B	2686	14654	0371	00351	1213
0225	0335	3381	218 B	2692	14662	0401	00416	1155
0250	0343	3386	163 B	2696	14670	0429	00486	1124
0300	0350	3394	121	2702	14682	0485	00643	1074
0400	0362	3407	107	2711	14706	0589	01016	0996
0500	0352	3415	071	2718	14719	0687	01465	0934
0600	0341	3422	077 B	2725	14732	0778	01981	0878
0700	0326	3428	075 B	2731	14743	0864	02555	0825
0800	0310	3433	071 B	2736	14753	0945	03179	0777
1000	0278	3441	078 B	2746	14774	1094	04549	0693
1200	0257	3446	076 B	2752	14799	1230	06080	0645
1500	0230	3453	073 B	2759	14839	1417	08665	0584
2000	0193	3460	134	2768	14909	1694	13616	0507
2500	0172	3464	196	2773	14986	1943	19373	0470
3000	0156	3467	258	2776	15066	2176	25979	0443
3500	0152	3468	297	2777	15151	2403	33620	0445
4000	0151	3469	325	2778	15239	2633	42559	0452

C-REF-NO 001	YR 1965	DEPTH C 4206	WAVES 1 3122	AIR T 03.8	VIS 6
CONS. NO 007	MONTH 2	MXSAMPD 20	WAVES 2 2823	WET B 03.3	STN 103
LAT 50-02 N	DAY 03	NO.DPTH 21	WND-DIR 310	WW-CODE 15	
LON 144-57 W	HR 19.1	W-COLOR 10	WND-SPD 09	CLD-TPE 6	
MARSD SQ 195	C/I 1802	W-TRNSP 11	BARO 997.0	CLD-AMT 5	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
191	0000	046 B	3282	704 B	2602	14664
191	0010	0453	3279	705 B	2600	14663
191	0020	0454	3279	711 B	2600	14665
191	0030	0454	3280	701 B	2601	14667
191	0050	0454	3280	713 B	2601	14670
191	0075	0453	3280	710 B	2601	14674
191	0100	0450	3280	714 B	2601	14676
191	0125	0414	3302	575 B	2622	14668
191	0150	0342	3348	430 B	2666	14648
191	0175	0332	3366	348 B	2681	14650
191	0200	0330	3371	278 B	2685	14654
191	0250	0340	3383	183 B	2694	14668
191	0300	0347 B	3390	130 B	2699	14681
191	0400	0358	3405	104 B	2710	14704
197	0500	0352	3416	078 B	2719	14719
197	0600	0338	3423	081 B	2726	14731
197	0800	0307	3434	077 B	2737	14752
197	1000	0278	3441	074 B	2746	14774
197	1200	0253	3447	064 B	2753	14798
197	1500	0225	3453	077 B	2760	14837
197	2000	0192 B	3460	144 B	2768	14908

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0460 B	3282	704 B	2602	14664	0000	00000	2001
0010	0453	3279	705 B	2600	14663	0020	00001	2018
0020	0454	3279	711 B	2600	14665	0041	00004	2020
0030	0454	3280	701 B	2601	14667	0061	00009	2013
0050	0454	3280	713 B	2601	14670	0101	00026	2014
0075	0453	3280	710 B	2601	14674	0152	00059	2016
0100	0450	3280	714 B	2601	14676	0203	00104	2014
0125	0414	3302	575 B	2622	14668	0251	00159	1815
0150	0342	3348	430 B	2666	14648	0292	00216	1402
0175	0332	3366	348 B	2681	14650	0325	00272	1259
0200	0330	3371	278 B	2685	14654	0356	00332	1221
0225	0334	3377	224 B	2690	14661	0387	00398	1180
0250	0340	3383	183 B	2694	14668	0416	00469	1143
0300	0347 B	3390	130 B	2699	14681	0472	00629	1101
0400	0358	3405	104 B	2710	14704	0579	01009	1007

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0500	0352	3416	078 B	2719	14719	0677	01458	0926
0600	0338	3423	081 B	2726	14731	0767	01969	0867
0700	0323	3429	080 B	2732	14742	0852	02535	0813
0800	0307	3434	077 B	2737	14752	0932	03150	0766
1000	0278	3441	074 B	2746	14774	1080	04514	0696
1200	0253	3447	064 B	2753	14798	1215	06035	0636
1500	0225	3453	077 B	2760	14837	1399	08584	0575
2000	0192 B	3460	144 B	2768	14908	1674	13502	0507

C-REF-NO 001	YR 1965	DEPTH C 4206	WAVES 1 1822	AIR T 06.1	VIS 3
CONS. NO 008	MONTH 2	MXSAMPD 04	WAVES 2 2923	WET B 06.1	STN 104
LAT 50-03 N	DAY 08	NO.DPTH 14	WND-DIR 180	WW-CODE 45	
LON 144-59 W	HR 19.0	W-COLOR 10	WND-SPD 09	CLD-TPE X	
MARSD SQ 195	C/I 1802	W-TRNSP 19	BARO 1023.0	CLD-AMT 9	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
190	0000	049 B	3280	725 B	2597	14677
190	0010	0460	3277	715 B	2598	14665
190	0020	0461	3277	722 B	2597	14667
190	0030	0463	3277	725 B	2597	14670
190	0050	0458 B	3279	715 B	2599	14671
190	0075	0458	3278	720 B	2599	14675
190	0100	0458	3278	720 B	2599	14679
190	0125	0444	3284	705 B	2605	14679
190	0150	0373	3325	534 B	2644	14658
190	0175	0335	3357	405 B	2674	14650
190	0200	0330	3367	329 B	2682	14654
190	0250	0337	3380	208 B	2692	14667
190	0300	0346	3390	118 B	2699	14680
190	0400	0356	3405	100 B	2710	14703

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0490 B	3280	725 B	2597	14677	0000	00000	2047
0010	0460	3277	715 B	2598	14665	0021	00001	2040
0020	0461	3277	722 B	2597	14667	0041	00004	2042
0030	0463	3277	725 B	2597	14670	0062	00009	2045
0050	0458 B	3279	715 B	2599	14671	0103	00026	2026
0075	0458	3278	720 B	2599	14675	0154	00059	2036
0100	0458	3278	720 B	2599	14679	0205	00105	2038
0125	0444	3284	705 B	2605	14679	0256	00163	1980
0150	0373	3325	534 B	2644	14658	0301	00227	1604
0175	0335	3357	405 B	2674	14650	0338	00288	1329
0200	0330	3367	329 B	2682	14654	0370	00350	1251
0225	0332	3374	264 B	2688	14660	0401	00417	1200
0250	0337	3380	208 B	2692	14667	0431	00490	1163
0300	0346	3390	118 B	2699	14680	0488	00651	1100
0400	0356	3405	100 B	2710	14703	0594	01030	1005

C-REF-NO 001	YR 1965	DEPTH C 4206	WAVES 1 3622	AIR T 03.8	VIS 2
CONS. NO 009	MONTH 2	MXSAMPD 20	WAVES 2 49X4	WET B 03.8	STN 105
LAT 50-05 N	DAY 10	NO.DPTH 21	WND-DIR 360	WW-CODE 45	
LON 145-03 W	HR 19.0	W-COLOR 10	WND-SPD 07	CLD-TPE X	
MARSD SQ 195	C/I 1802	W-TRNSP 17	BARU 1020.0	CLD-AMT 9	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
190	0000	051 B	3279	715 B	2594	14685
190	0010	0467	3276	706 B	2596	14668
190	0020	0468	3277	721 B	2597	14670
190	0030	0469	3277	718 B	2597	14672
190	0050	0468 B	3277	720 B	2597	14675
190	0075	0464 B	3277	733 B	2597	14678
190	0100	0458	3279	719 B	2599	14680
190	0125	0445	3286	710 B	2606	14679
190	0150	0390	3311	600 B	2632	14664
190	0175	0332	3362	362 B	2678	14650
190	0200	0328	3371	297 B	2685	14653
190	0250	0338	3382	191 B	2693	14667
190	0300	0348	3392	122 B	2700	14681
190	0400	0358 B	3407	103 B	2711	14704
196	0500	0354	3416	085 B	2719	14720
196	0600	0336	3424	079 B	2727	14730
196	0800	0307	3434	066 B	2737	14752
196	1000	0280	3442	069 B	2746	14775
196	1200	0256	3446	067 B	2752	14799
196	1500	0225	3453	070 B	2760	14837
196	2000	0196	3460	131 B	2768	14910

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0510 B	3279	715 B	2594	14685	0000	00000	2076
0010	0467	3276	706 B	2596	14668	0021	00001	2054
0020	0468	3277	721 B	2597	14670	0041	00004	2049
0030	0469	3277	718 B	2597	14672	0062	00010	2051
0050	0468 B	3277	720 B	2597	14675	0103	00026	2051
0075	0464 B	3277	733 B	2597	14678	0155	00060	2049
0100	0458	3279	719 B	2599	14680	0206	00106	2030
0125	0445	3286	710 B	2606	14679	0257	00164	1966
0150	0390	3311	600 B	2632	14664	0303	00229	1726
0175	0332	3362	362 B	2678	14650	0341	00291	1289
0200	0328	3371	297 B	2685	14653	0373	00352	1219
0225	0332	3377	240 B	2690	14660	0403	00418	1178
0250	0338	3382	191 B	2693	14667	0432	00490	1149
0300	0348	3392	122 B	2700	14681	0489	00648	1087
0400	0358 B	3407	103 B	2711	14704	0594	01023	0992

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0500	0354	3416	085 B	2719	14720	0691	01470	0928
0600	0336	3424	079 B	2727	14730	0781	01978	0857
0700	0321	3430	072 B	2733	14741	0865	02539	0807
0800	0307	3434	066 B	2737	14752	0944	03152	0766
1000	0280	3442	069 B	2746	14775	1092	04510	0691
1200	0256	3446	067 B	2752	14799	1227	06039	0646
1500	0225	3453	070 B	2760	14837	1413	08608	0575
2000	0196	3460	131 B	2768	14910	1689	13552	0512

C-REF-NO 001 YR 1965 DEPTH C 4206 WAVES 1 49XX AIR T 04.4 VIS 5
 CONS. NO 010 MONTH 2 MXSAMPD 04 WAVES 2 3035 WET B 03.8 STN 106
 LAT 49-58 N DAY 15 NO.DPTH 14 WND-DIR 990 WW-CODE 60
 LON 144-57 W HR 19.0 W-COLOR 10 WND-SPD 02 CLD-TPE 7
 MARSD SQ 159 C/I 1802 W-TRNSP 14 BARO 1005.0 CLD-AMT 8 HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
190	0000	053 B	3280	696 B	2592	14693
190	0010	0458	3285	720 B	2604	14666
190	0020	0460	3278	662 B	2598	14667
190	0030	0460	3278	662 B	2598	14669
190	0050	0460 B	3286	646 B	2605	14673
190	0075	0462	3280	616 B	2600	14677
190	0100	0460	3278	653 B	2598	14680
190	0125	0447 B	3283	669 B	2604	14680
190	0150	0392	3314	554 B	2634	14665
190	0175	0334	3356	390 B	2673	14650
190	0200	0329	3370	287 B	2684	14654
190	0250	0340	3382	178 B	2693	14668
190	0300	0350	3390	144 B	2698	14682
190	0400	0352 B	3402	077 B	2708	14701

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0530 B	3280	696 B	2592	14693	0000	00000	2090
0010	0458	3285	720 B	2604	14666	0020	00001	1978
0020	0460	3278	662 B	2598	14667	0041	00004	2033
0030	0460	3278	662 B	2598	14669	0061	00009	2034
0050	0460 B	3286	646 B	2605	14673	0101	00026	1976
0075	0462	3280	616 B	2600	14677	0152	00058	2025
0100	0460	3278	653 B	2598	14680	0203	00104	2040
0125	0447 B	3283	669 B	2604	14680	0254	00163	1991
0150	0392	3314	554 B	2634	14665	0300	00228	1705
0175	0334	3356	390 B	2673	14650	0339	00291	1336
0200	0329	3370	287 B	2684	14654	0371	00353	1227
0225	0333	3378	220 B	2690	14661	0401	00419	1176
0250	0340	3382	178 B	2693	14668	0431	00491	1151
0300	0350	3390	144 B	2698	14682	0487	00651	1104
0400	0352 B	3402	077 B	2708	14701	0595	01035	1024

C-REF-NO 001	YR 1965	DEPTH C 4206	WAVES 1 2122	AIR T 03.8	VIS 6
CONS. NO 011	MONTH 2	MXSAMPD 04	WAVES 2 3023	WET B 03.3	STN 107
LAT 50-02 N	DAY 19	NO.DPTH 14	WND-DIR 220	WW-CODE 02	
LON 144-50 W	HR 19.2	W-COLOR 10	WND-SPD 12	CLD-TPE 6	
MARSD SQ 195	C/I 1802	W-TRNSP 14	BARO 1025.0	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
192	0000	049 B	3275	714 B	2593	14676
192	0010	0482	3274	728 B	2593	14674
192	0019	0482 B	3274	734 B	2593	14676
192	0029	0485	3274	737 B	2592	14679
192	0048	0476	3275	735 B	2594	14678
192	0072	0464 B	3277	739 B	2597	14677
192	0097	0461	3278	743 B	2598	14680
192	0121	0462 B	3302	645 B	2617	14688
192	0146	0368	3333	517 B	2651	14657
192	0171	0350	3354	423 B	2670	14656
192	0196	0352	3370	333 B	2682	14663
192	0245	0352	3379	233 B	2689	14672
192	0295	0353	3388	173 B	2696	14682
192	0394	0356 B	3401	120 B	2707	14701

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0490 B	3275	714 B	2593	14676	0000	00000	2085
0010	0482	3274	728 B	2593	14674	0021	00001	2085
0020	0482 B	3274	734 B	2593	14676	0042	00004	2086
0030	0485	3274	737 B	2593	14679	0063	00010	2089
0050	0475	3275	735 B	2595	14678	0105	00027	2072
0075	0463 B	3277	742 B	2597	14677	0157	00060	2052
0100	0463	3280	734 B	2600	14682	0208	00106	2027
0125	0448 C	3307	624 B	2623	14683	0256	00162	1811
0150	0362	3337	501 B	2655	14655	0298	00220	1504
0175	0350	3357	408 B	2672	14657	0334	00280	1343
0200	0352	3371	322 B	2683	14664	0367	00342	1239
0225	0352	3377	265 B	2688	14669	0397	00409	1198
0250	0352	3380	226 B	2690	14673	0427	00482	1178
0300	0353	3388	163 B	2697	14683	0485	00645	1119
0400	0356 B	3402	121 B	2707	14703	0594	01033	1030

C-REF-NO 001	YR 1965	DEPTH C 4206	WAVES 1 2722	AIR T 00.5	VIS 7
CONS. NO 012	MONTH 2	MXSAMPD 41	WAVES 2 2723	WET B 00.0	STN 108
LAT 50-00 N	DAY 24	NO.DPTH 26	WND-DIR 270	WW-CODE 74	
LON 144-57 W	HR 19.0	W-COLOR 20	WND-SPD 07	CLD-TPE 8	
MARSD SQ 195	C/I 1802	W-TRNSP 18	BARO 1006.0	CLD-AMT 3	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
190	0000	056 B	3276	660 B	2586	14705
190	0010	0464	3274	653 B	2595	14667
190	0020	0465	3274	673 B	2595	14669
190	0030	0467	3274	726 B	2594	14671
190	0050	0464	3274	687 B	2595	14673
190	0075	0460 B	3275	703 B	2596	14676
190	0100	0443	3276	725 B	2599	14673
190	0125	0442	3283	691 B	2604	14678
190	0150	0391	3318	577 B	2637	14665
190	0175	0334	3356	391 B	2673	14650
190	0200	0329	3367	330 B	2682	14653
190	0250	0338	3379	201 B	2691	14667
190	0300	0346	3387	132 B	2696	14680
190	0400	0358 B	3402	073 B	2707	14703
196	0492	0352	3412	071 B	2716	14717
196	0591	0345	3421	066 B	2723	14732
196	0788	0315	3431	071 B	2734	14753
196	0986	0284 B	3439	074 B	2743	14774
196	1183	0258	3444	074 B	2750	14797
196	1480	0228		072 B		
196	1977	0195	3459	137	2767	14905
206	2460	0175	3464	183	2772	14980
206	2960	0158		262		
206	3449	0152	3467	297	2777	15142
206	3949	0151	3468	321	2777	15230
206	4149	0152	3469	322	2778	15266

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0560 B	3276	660 B	2586	14705	0000	00000	2153
0010	0464	3274	653 B	2595	14667	0021	00001	2066
0020	0465	3274	673 B	2595	14669	0042	00004	2068
0030	0467	3274	726 B	2594	14671	0063	00010	2071
0050	0464	3274	687 B	2595	14673	0105	00027	2070
0075	0460 B	3275	703 B	2596	14676	0157	00060	2060
0100	0443	3276	725 B	2599	14673	0208	00106	2037
0125	0442	3283	691 B	2604	14678	0259	00165	1986
0150	0391	3318	577 B	2637	14665	0305	00229	1674
0175	0334	3356	391 B	2673	14650	0343	00292	1336

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0200	0329	3367	330 B	2682	14653	0375	00355	1250
0225	0332	3374	262 B	2687	14660	0406	00422	1201
0250	0338	3379	201 B	2691	14667	0436	00495	1172
0300	0346	3387	132 B	2696	14680	0494	00658	1123
0400	0358 B	3402	073 B	2707	14703	0603	01046	1030
0500	0352	3413	071 B	2716	14719	0703	01506	0950
0600	0344	3422	066 B	2724	14733	0795	02028	0884
0700	0330	3427	068 B	2730	14745	0882	02607	0833
0800	0313	3432	071 B	2735	14755	0964	03239	0791
1000	0282 B	3439	074 B	2744	14776	1116	04640	0712
1200	0256	3444	074 B	2750	14799	1255	06206	0658
1500	0226	3451	074 B	2758	14837	1445	08836	0592
2000	0194	3459	139	2767	14909	1726	13856	0514
2500	0173	3464	190	2773	14986	1977	19657	0471
3000	0157	3466	266	2776	15066	2212	26327	0450
3500	0152	3467	300	2777	15151	2443	34083	0451
4000	0151	3468	320	2778	15239	2675	43108	0455

C-REF-NO 001	YR 1965	DEPTH C 4206	WAVES 1 2822	AIR T 03.3	VIS 6
CONS. NO 013	MONTH 2	MXSAMPD 04	WAVES 2 2923	WET B 02.7	STN 109
LAT 50-00 N	DAY 26	NO.DPTH 14	WND-DIR 280	WW-CODE 03	
LON 144-43 W	HR 20.0	W-COLOR 10	WND-SPD 10	CLD-TPE 6	
MARSD SQ 195	C/I 1802	W-TRNSP 17	BARO 1008.0	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
200	0000	050 B	3276	649 B	2592	14680
200	0010	0471	3274	669 B	2594	14670
200	0019	0473	3274	670 B	2594	14672
200	0029	0474	3278	665 B	2597	14675
200	0048	0474	3276	677 B	2595	14677
200	0072	0476 B	3278	665 B	2597	14682
200	0097	0462	3280	699 B	2600	14681
200	0121	0450	3291	605 B	2610	14681
200	0146	0371	3331	496 B	2649	14658
200	0171	0339	3362	382 B	2677	14652
200	0195	0334	3369	317 B	2683	14655
200	0245	0342	3383	215 B	2694	14668
200	0295	0355	3390	163 B	2698	14683
200	0395	0357	3402	111 B	2707	14702

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0500 B	3276	649 B	2592	14680	0000	00000	2088
0010	0471	3274	669 B	2594	14670	0021	00001	2074
0020	0473	3274	669 B	2594	14672	0042	00004	2074
0030	0474	3278	666 B	2597	14675	0063	00010	2048
0050	0474	3276	676 B	2595	14678	0104	00027	2065
0075	0475 B	3278	671 B	2597	14682	0156	00060	2053
0100	0462	3280	691 B	2600	14682	0207	00106	2024
0125	0438 B	3297	588 B	2615	14678	0256	00162	1879
0150	0363	3337	476 B	2655	14656	0299	00222	1504
0175	0337	3364	369 B	2679	14652	0334	00280	1279
0200	0334	3371	305 B	2684	14656	0365	00341	1228
0225	0337	3378	250 B	2690	14662	0396	00407	1177
0250	0343	3384	208 B	2694	14670	0425	00478	1140
0300	0352	3392	150 C	2700	14683	0481	00636	1088
0400	0357	3402	112 B	2707	14703	0588	01019	1027

C-REF-NO 001	YR 1965	DEPTH C 3886	WAVES 1 1822	AIR T 06.6	VIS 0
CONS. NO 014	MONTH 3	MXSAMPD 04	WAVES 2 2524	WET B 06.6	STN 010
LAT 49-37 N	DAY 09	NO.DPTH 14	WND-DIR 180	WW-CODE 45	
LON 138-40 W	HR 03.2	W-COLOR 10	WND-SPD 05	CLD-TPE X	
MARSD SQ 158	C/I 1802	W-TRNSP 19	BARO 1033.0	CLD-AMT 9	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
032	0000	064 B	32679		2569	14736
032	0010	0613	32640		2570	14726
032	0020	0606 B	32641		2571	14725
032	0030	0602	32667		2573	14726
032	0050	0578	32642		2574	14719
032	0075	0554	32677		2580	14714
032	0100	0548	32661		2579	14715
032	0125	0537	32833		2594	14717
032	0150	0607	33558		2643	14759
032	0175	0601	33800		2663	14764
032	0200	0520	33748		2668	14735
032	0250	0464	33807		2679	14720
032	0300	0429	33870		2688	14715
032	0400	0397 B	33985		2700	14719

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0640 B	32679		2569	14736	0000	00000	2307
0010	0613	32640		2570	14726	0023	00001	2305
0020	0606 B	32641		2571	14725	0046	00005	2298
0030	0602	32667		2573	14726	0069	00011	2274
0050	0578	32642		2574	14719	0115	00029	2267
0075	0554	32677		2580	14714	0172	00065	2216
0100	0548	32661		2579	14715	0227	00116	2224
0125	0537	32833		2594	14717	0282	00178	2086
0150	0607	33558		2643	14759	0328	00243	1629
0175	0601	33800		2663	14764	0367	00308	1444
0200	0520	33748		2668	14734	0403	00376	1390
0225	0482 C	3376 C		2674	14723	0437	00451	1338
0250	0464	33807		2679	14720	0470	00532	1288
0300	0429	33870		2688	14715	0533	00709	1208
0400	0397 B	33985		2700	14719	0649	01124	1096

C-REF-NO 001	YR 1965	DEPTH C 3767	WAVES 1 18XX	AIR T	VIS 3
CONS. NO 015	MONTH 3	MXSAMPD 04	WAVES 2 18XX	WET B	STN 009
LAT 49-26 N	DAY 09	NO.DPTH 14	WND-DIR 180	WW-CODE 45	
LON 136-40 W	HR 09.8	W-COLOR	WND-SPD 09	CLD-TPE X	
MARSD SQ 158	C/I 1802	W-TRNSP	BARO 1034.0	CLD-AMT 9	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
098	0000	068 B	32571		2556	14751
098	0010	0651 D	32593		2561	14741
098	0020	0640 C	32571		2561	14738
098	0030	0632	32590		2563	14737
098	0050	0624 B	32582		2564	14737
098	0075	0619	32585		2565	14739
098	0100	0618	32592		2565	14743
098	0125	0572	33340		2630	14738
098	0150	0568	33606		2651	14744
098	0175	0550	33744		2664	14743
098	0200	0533	33802		2671	14741
098	0250	0480	33844		2680	14728
098	0300	0444	33882		2687	14721
098	0400	0411	33999		2700	14726

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0680 B	32571		2556	14751	0000	00000	2437
0010	0651 D	32593		2561	14741	0024	00001	2386
0020	0640 C	32571		2561	14738	0048	00005	2391
0030	0632	32590		2563	14737	0072	00011	2368
0050	0624 B	32582		2564	14737	0120	00031	2367
0075	0619	32585		2565	14739	0179	00069	2361
0100	0618	32592		2565	14743	0239	00122	2358
0125	0572	33340		2630	14738	0290	00181	1747
0150	0568	33606		2651	14744	0332	00239	1546
0175	0550	33744		2664	14743	0369	00301	1425
0200	0533	33802		2671	14741	0404	00369	1364
0225	0507	3383 B		2676	14734	0438	00442	1317
0250	0480	33844		2680	14728	0471	00522	1278
0300	0444	33882		2687	14721	0534	00699	1215
0400	0411	33999		2700	14726	0651	01116	1101

C-REF-NO 001	YR 1965	DEPTH C 3557	WAVES 1 3521	AIR T 06.1	VIS 1
CONS. NO 016	MONTH 3	MXSAMPD 04	WAVES 2 2722	WET B 06.1	STN 008
LAT 49-19 N	DAY 09	NO.DPTH 14	WND-DIR 350	WW-CODE 45	
LON 134-40 W	HR 16.4	W-COLOR 10	WND-SPD 05	CLD-TPE X	
MARSD SQ 158	C/I 1802	W-TRNSP 21	BARO 1035.0	CLD-AMT 9	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
164	0000	062 B	32563		2563	14727
164	0010	0607	32570		2565	14723
164	0020	0602 B	32563		2565	14723
164	0030	0592	32567		2566	14720
164	0050	0574 B	32571		2569	14716
164	0075	0566	32578		2570	14717
164	0100	0551				
164	0125	0572	32932		2598	14733
164	0150	0599	33501		2639	14755
164	0175	0625	33801		2660	14774
164	0200	0589	33860		2669	14764
164	0250	0509	33879		2680	14740
164	0300	0480	33945		2688	14737
164	0400	0440	34019		2699	14738

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0620 B	32563		2563	14727	0000	00000	2370
0010	0607	32570		2565	14723	0024	00001	2351
0020	0602 B	32563		2565	14723	0047	00005	2351
0030	0592	32567		2566	14720	0071	00011	2338
0050	0574 B	32571		2569	14716	0118	00030	2316
0075	0566	32578		2570	14717	0176	00067	2304
0100	0551	3266 H		2579	14716	0233	00118	2227
0125	0572	32932		2598	14733	0287	00180	2052
0150	0599	33501		2639	14755	0334	00246	1662
0175	0625	33801		2660	14774	0373	00311	1473
0200	0589	33860		2669	14764	0409	00380	1388
0225	0546 B	3388 C		2675	14751	0443	00455	1329
0250	0509	33879		2680	14740	0476	00535	1285
0300	0480	33945		2688	14737	0539	00712	1208
0400	0440	34019		2699	14738	0656	01132	1118

C-REF-NO 001 YR 1965 DEPTH C 3273 WAVES 1 36XX AIR T 08.3 VIS
 CONS. NO 017 MONTH 3 MXSAMPD 04 WAVES 2 49XX WET B 07.2 STN 007
 LAT 49-10 N DAY 09 NO.DPTH 14 WND-DIR 360 WW-CODE 01
 LON 132-40 W HR 22.8 W-COLOR 10 WND-SPD 11 CLD-TPE 4
 MARSD SQ 158 C/I 1802 W-TRNSP 21 BARO 1032.0 CLD-AMT 1 HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
228	0000	072 B	32513		2546	14766
228	0010	0670	32515		2553	14748
228	0019	0667 B	32505		2552	14748
228	0029	0666	32509		2553	14749
228	0049	0666 B	32530		2554	14753
228	0073	0661	32548		2556	14755
228	0097	0658	32558		2557	14758
228	0122	0618	33078		2604	14753
228	0146	0607	33537		2641	14758
228	0171	0590	33740		2659	14758
228	0195	0570	33806		2667	14755
228	0244	0532	33872		2677	14748
228	0293	0496	33894		2683	14742
228	0390	0431	33988		2697	14732

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0720 B	32513		2546	14766	0000	00000	2531
0010	0670	32515		2553	14748	0025	00001	2468
0020	0667 B	32505		2552	14748	0050	00005	2473
0030	0666	32510		2553	14749	0075	00011	2469
0050	0666 B	32531		2554	14753	0124	00032	2456
0075	0661	3254 B		2556	14755	0186	00071	2447
0100	0653	3261 C		2562	14757	0247	00126	2389
0125	0616	3314 B		2609	14753	0302	00188	1946
0150	0605	33584		2645	14758	0346	00251	1607
0175	0587	33756		2661	14758	0385	00315	1460
0200	0566	33816		2668	14754	0421	00384	1393
0225	0546	33854		2674	14751	0455	00459	1344
0250	0527	33875		2677	14747	0489	00541	1309
0300	0491	3392 C		2685	14741	0553	00722	1242

C-REF-NO 001	YR 1965	DEPTH 109	WAVES 1 3620	AIR T 09.9	VIS 7
CONS. NO 018	MONTH 3	MXSAMPD 01	WAVES 2 2723	WET B 08.8	STN 002
LAT 48-30 N	DAY 10	NO.DPTH 7	WND-DIR 360	WW-CODE 02	
LON 126-00 W	HR 19.6	W-COLOR 90	WND-SPD 02	CLD-TPE 1	
MARSD SQ 157	C/I 1802	W-TRNSP 08	BARO 1021.0	CLD-AMT 1	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
196	0000	095 B	29300		2261	14813
196	0010	0802 C	29608		2307	14762
196	0020	0742 D	30027		2348	14745
196	0030	0764	31609		2469	14776
196	0050	0758	32019		2502	14782
196	0075	0767	32621		2548	14798
196	0100	0747	33671		2633	14808

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0950 B	29300		2261	14813	0000	00000	5243
0010	0802 C	29608		2307	14762	0050	00002	4809
0020	0742 D	30027		2348	14745	0097	00009	4419
0030	0764	31609		2469	14776	0135	00019	3268
0050	0758	32019		2502	14782	0198	00044	2957
0075	0767	32621		2548	14798	0267	00088	2524
0100	0747	33671		2633	14808	0320	00134	1719

C-REF-NO 001 YR 1965 DEPTH 128 WAVES 1 49XX AIR T 09.9 VIS
 CONS. NO 019 MONTH 3 MXSAMPD 01 WAVES 2 27XX WET B 08.8 STN 001
 LAT 48-33 N DAY 10 NO.DPTH 8 WND-DIR 990 WW-CODE 02
 LON 125-33 W HR 21.6 W-COLOR 60 WND-SPD 01 CLD-TPE 2
 MARSD SQ 157 C/I 1802 W-TRNSP 14 BARO 1020.0 CLD-AMT 1 HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
216	0000	093 B	30390		2349	14819
216	0010	0828	30413		2366	14782
216	0020	0797	31009		2417	14779
216	0030	0804	30572		2382	14778
216	0050	0754 B	31668		2475	14776
216	0075	0758	32492		2539	14793
216	0100	0740	33480		2619	14803
216	0125	0721	33644		2634	14801

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0930 B	30390		2349	14819	0000	00000	4403
0010	0828	30413		2366	14782	0043	00002	4243
0020	0797	31009		2417	14779	0084	00008	3758
0030	0804	30572		2382	14778	0123	00018	4094
0050	0754 B	31668		2475	14776	0196	00048	3213
0075	0758	32492		2539	14793	0270	00093	2608
0100	0740	33480		2619	14803	0326	00143	1852
0125	0721	33644		2634	14801	0371	00194	1708

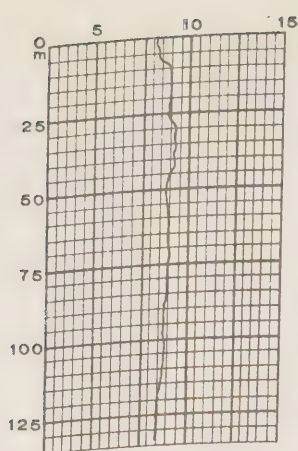
SECTION IV

Bathythermograms

CCGS "ST. CATHARINES"

Daily bathythermograms
and
OCEAN series bathythermograms

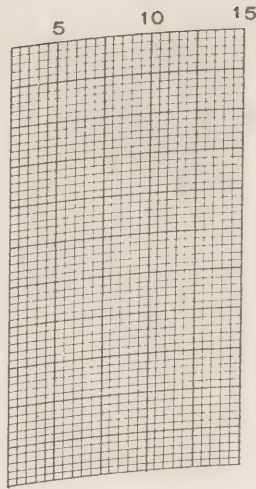
C.C.G.S. "St. Catharines", Survey P-65-1



*23-01-65-00.8

48°33'n

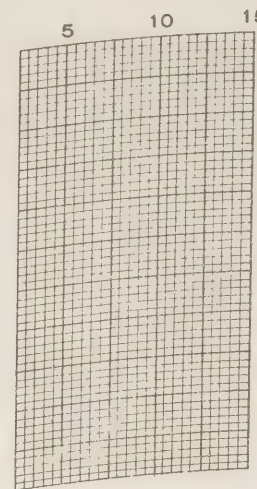
125°31'w



*23-01-65-09.7

48°45'n

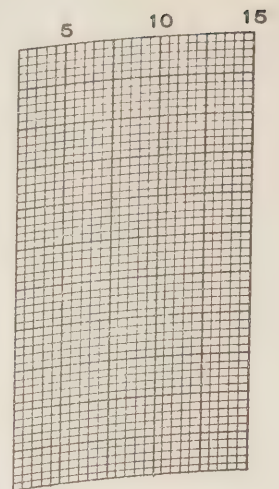
127°40'w



*23-01-65-14.2

48°50'n

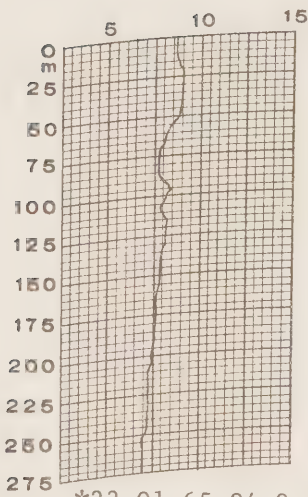
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23-01-65-18.0

48°56'n

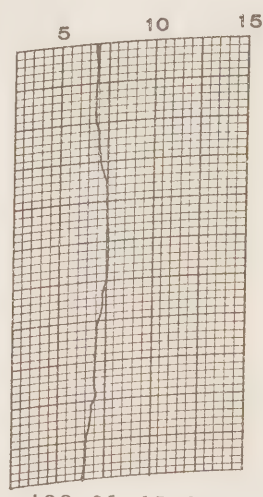
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*23-01-65-04.9

48°42'n

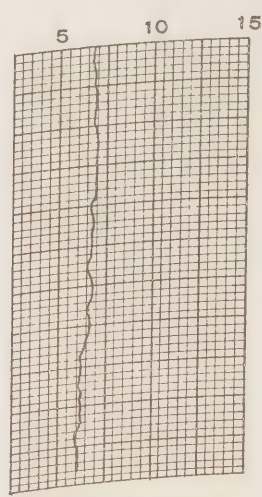
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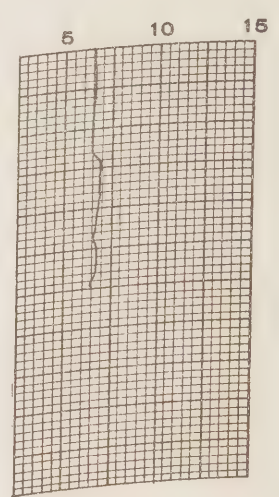
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48°50'n

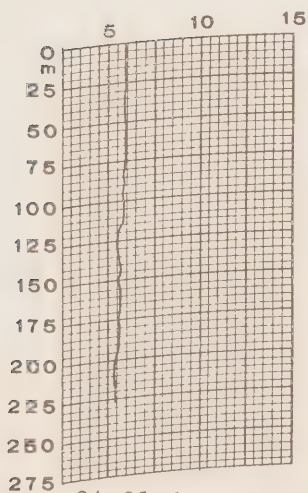
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23-01-65-18.0

48°56'n

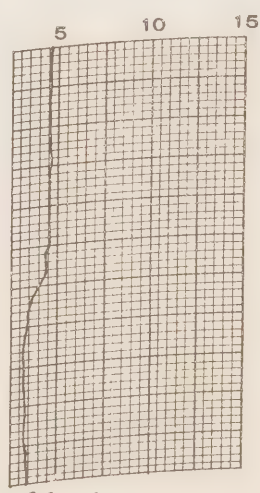
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24-01-65-20.8

49°28'n

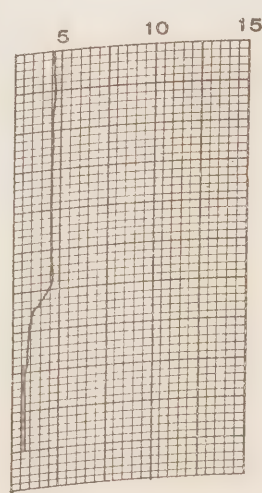
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26-01-65-18.0

50°00'n

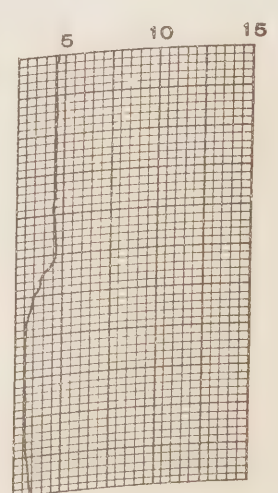
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26-01-65-21.0

50°00'n

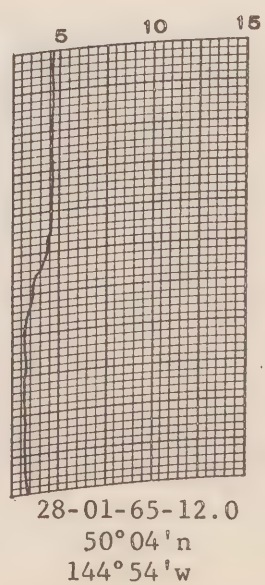
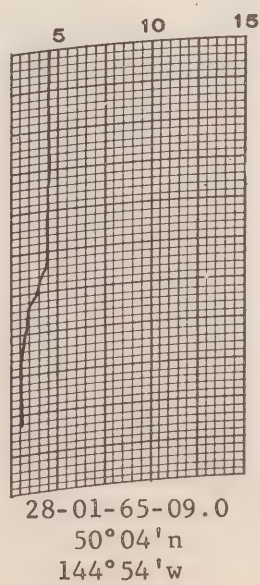
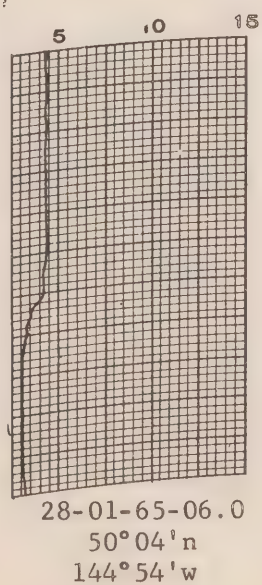
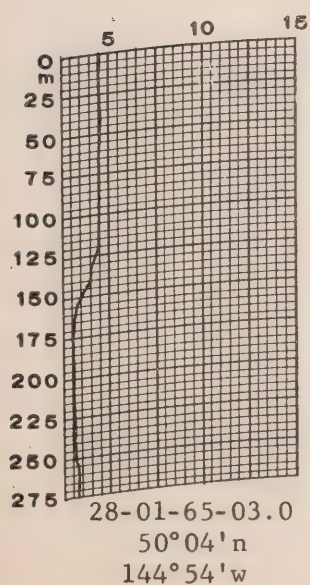
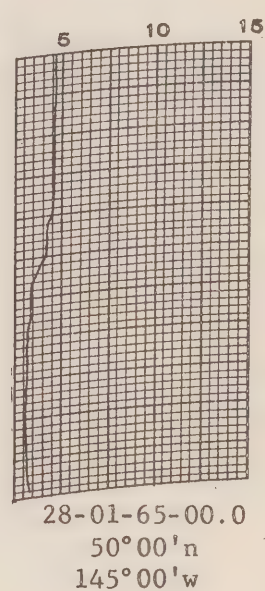
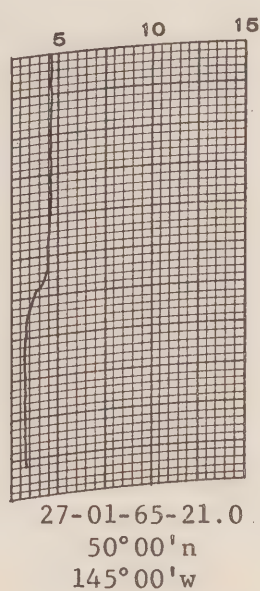
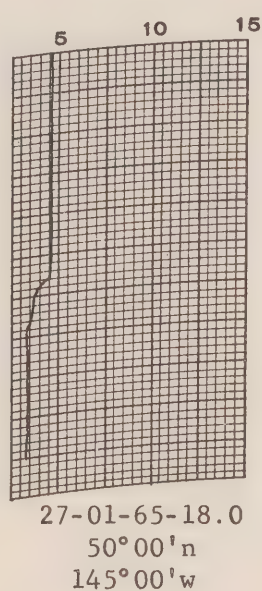
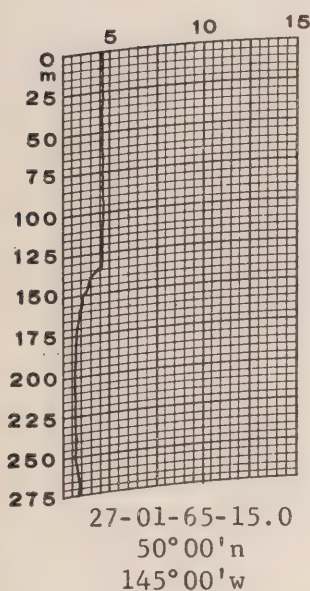
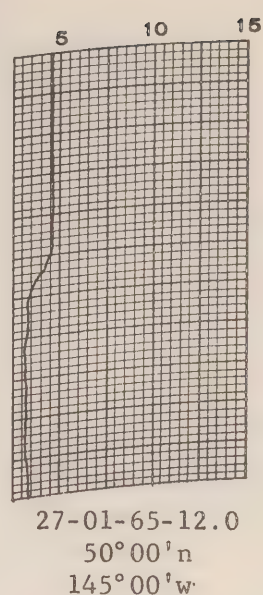
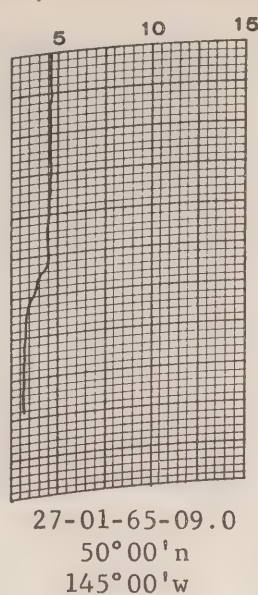
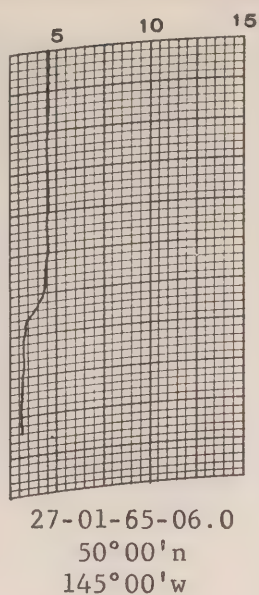
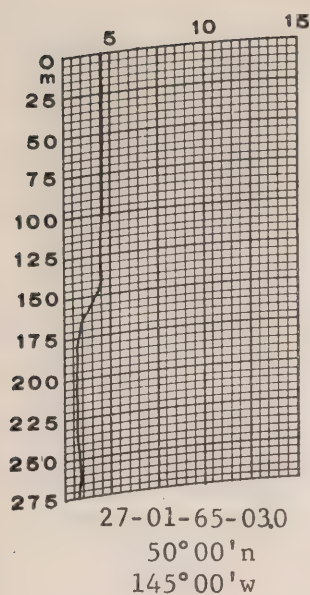
145°00'w



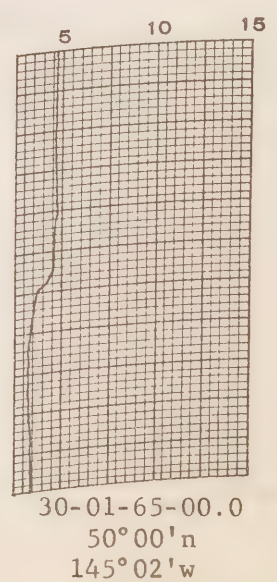
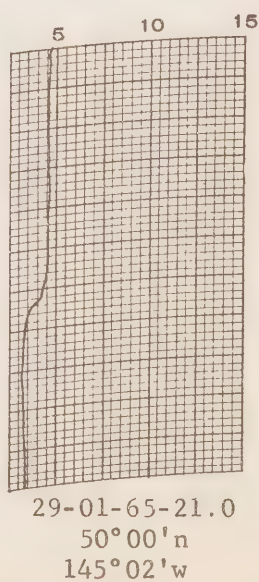
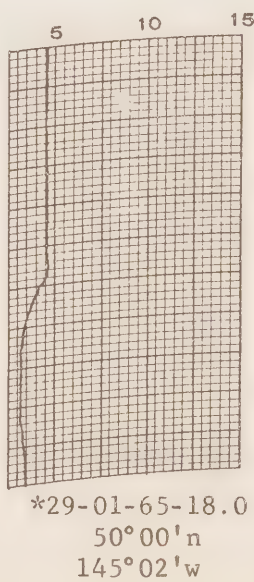
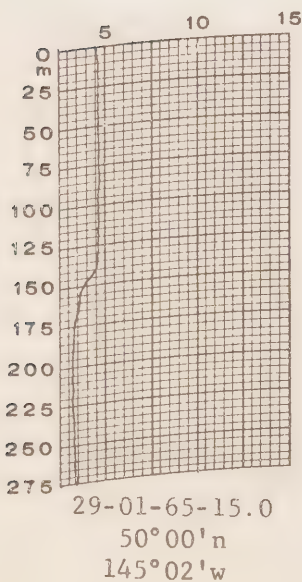
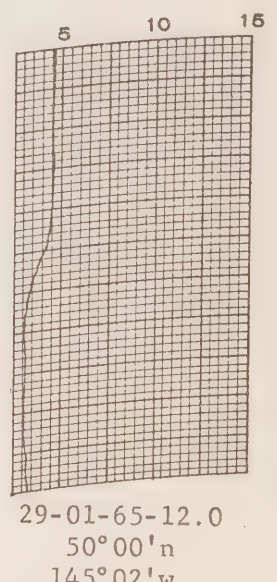
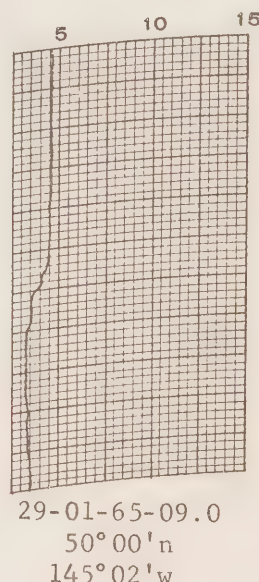
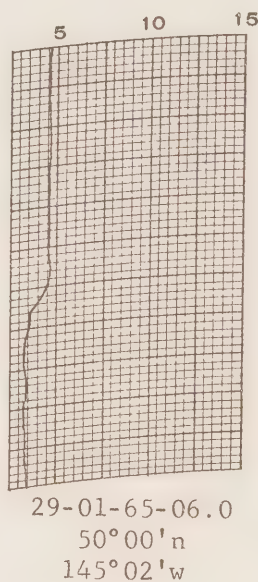
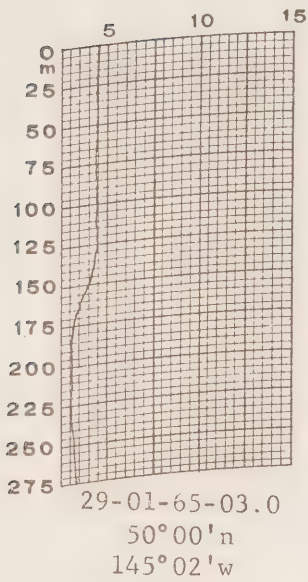
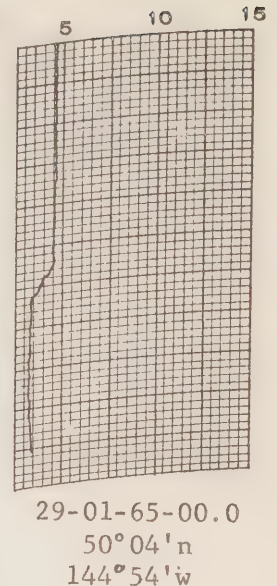
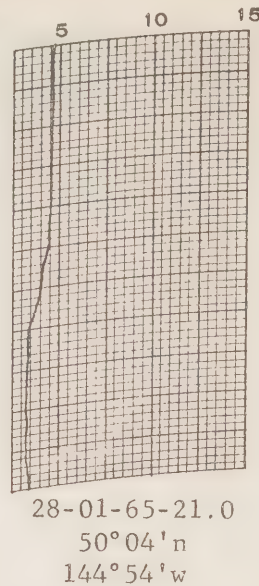
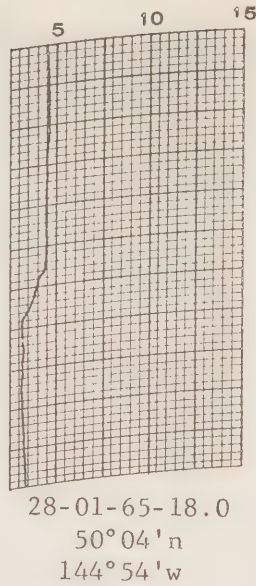
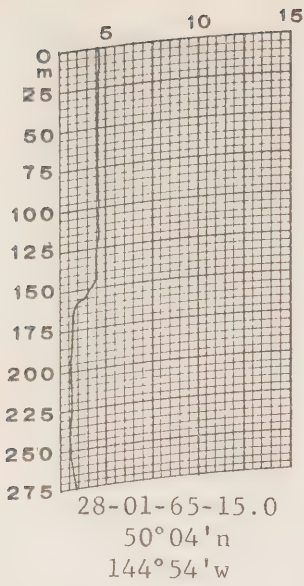
27-01-65-00.0

50°00'n

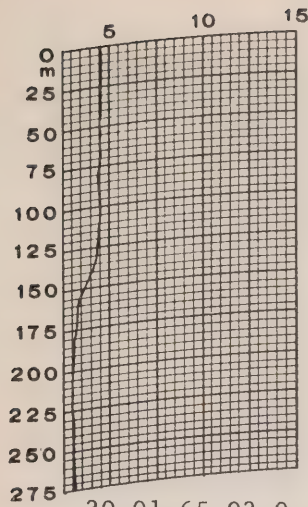
145°00'w



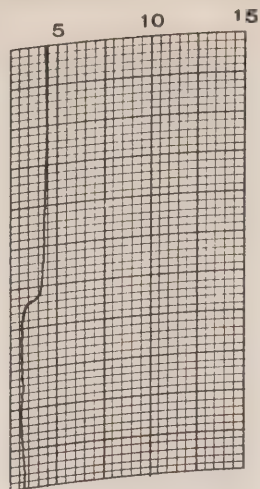
C.C.G.S. "St. Catharines", Survey P-65-1



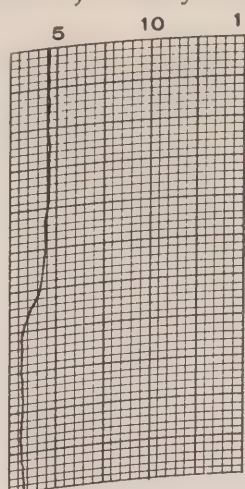
C.C.G.S. "St. Catharines", Survey P-65-1



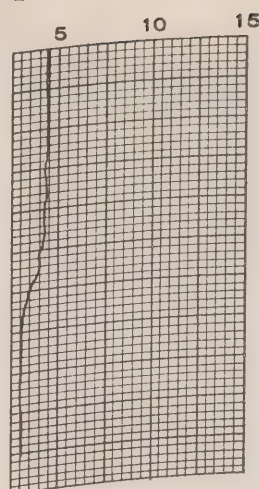
30-01-65-03.0
49°59'n
145°15'w



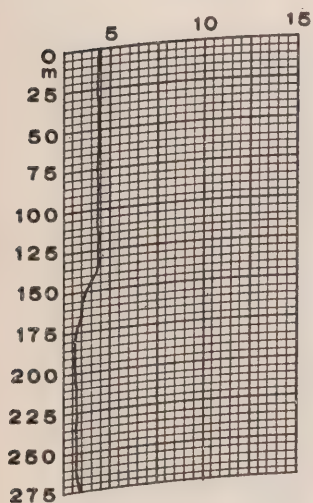
30-01-65-06.0
49°59'n
145°15'w



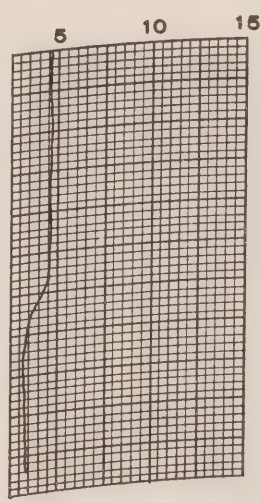
30-01-65-09.0
49°59'n
145°15'w



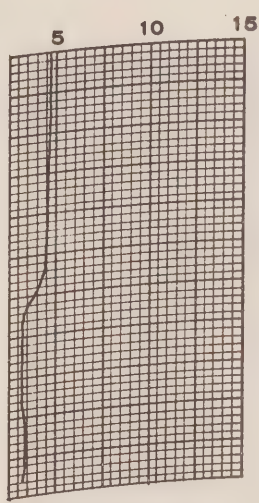
30-01-65-12.0
49°59'n
145°15'w



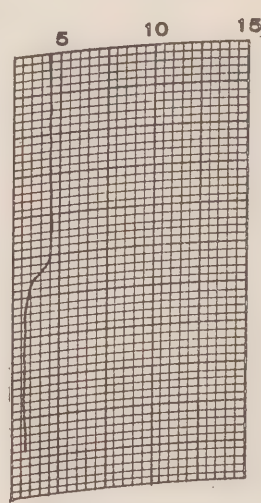
30-01-65-18.0
49°59'n
145°15'w



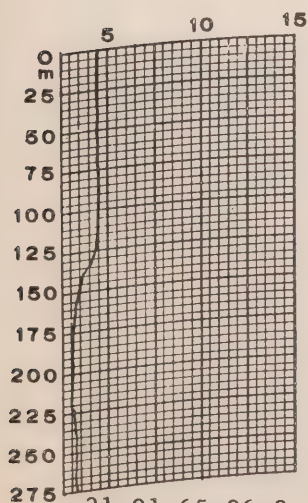
30-01-65-21.0
49°59'n
145°15'w



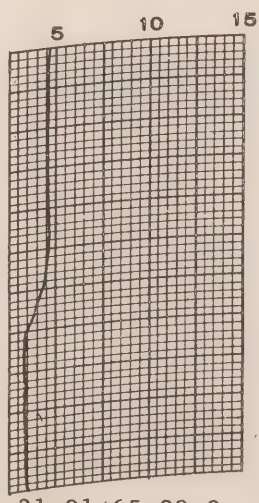
31-01-65-00.0
49°59'n
145°15'w



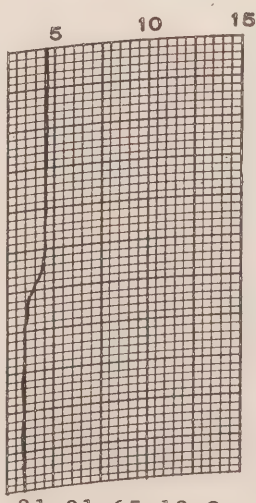
31-01-65-03.0
49°58'n
144°57'w



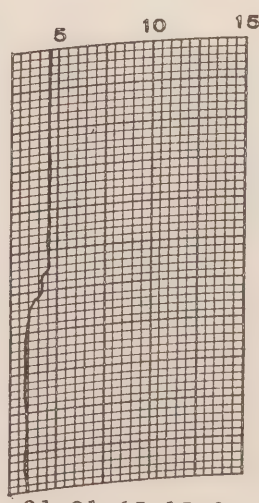
31-01-65-06.0
49°58'n
144°57'w



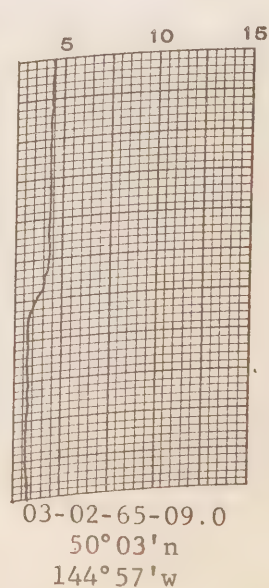
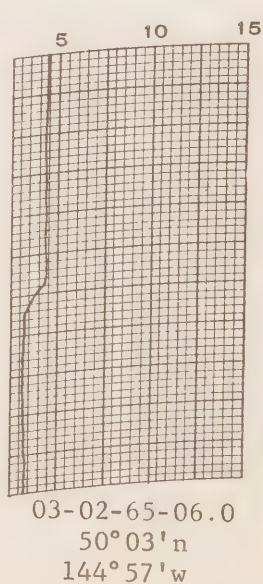
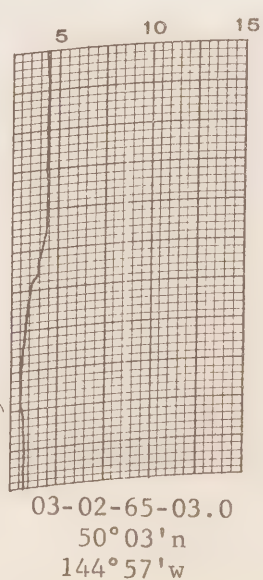
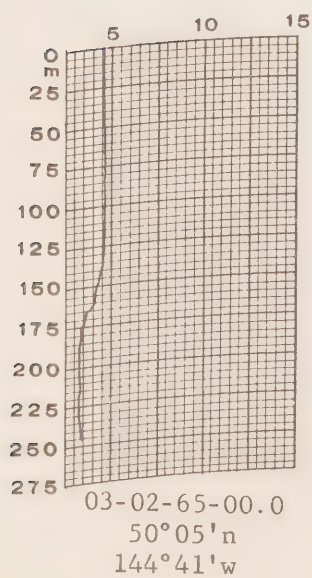
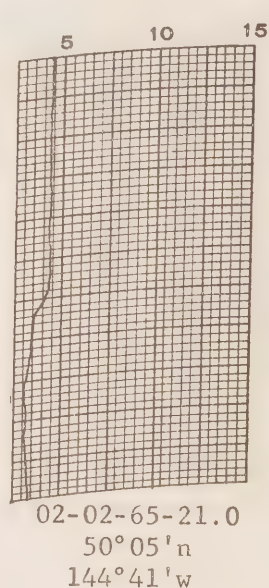
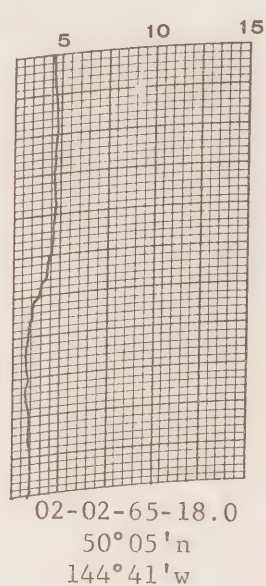
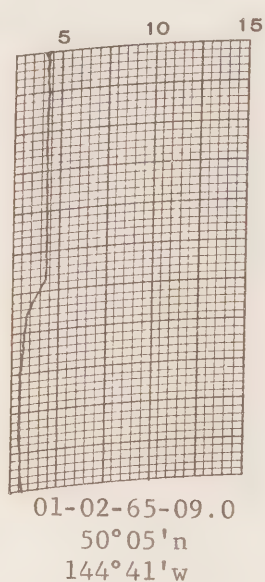
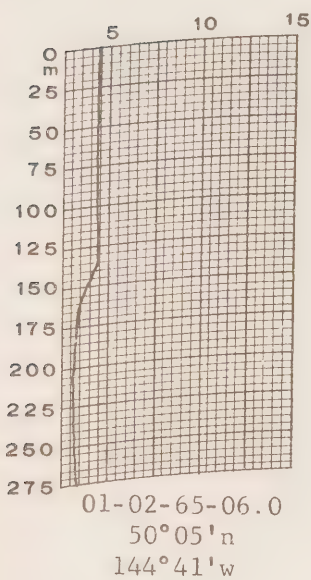
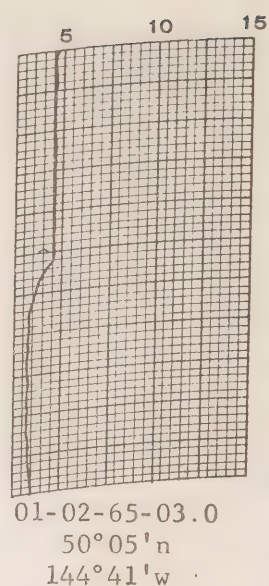
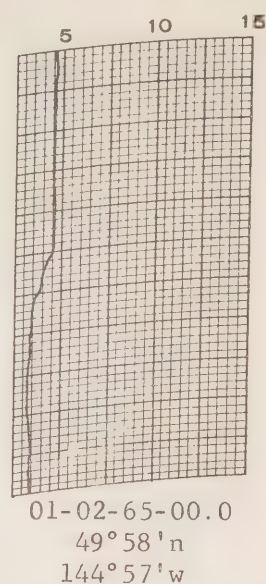
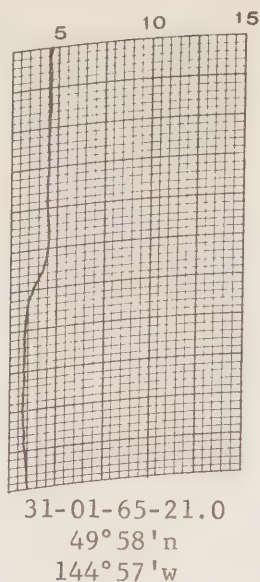
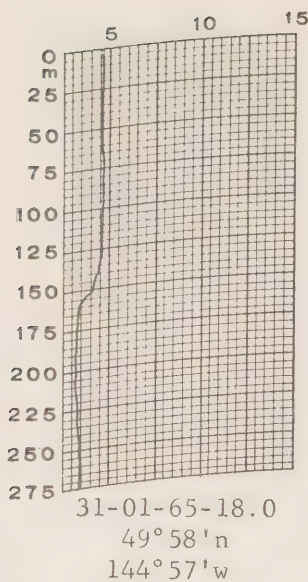
31-01-65-09.0
49°58'n
144°57'w



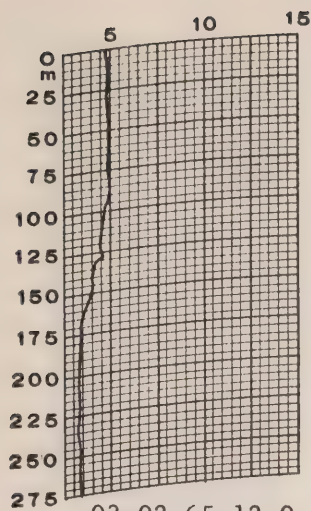
31-01-65-12.0
49°58'n
144°57'w



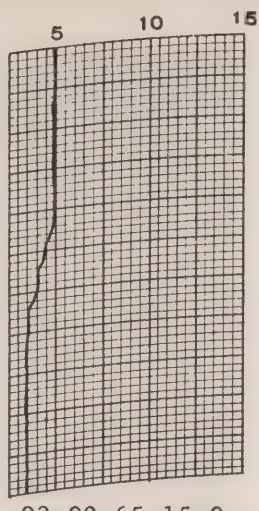
31-01-65-15.0
49°58'n
144°57'w



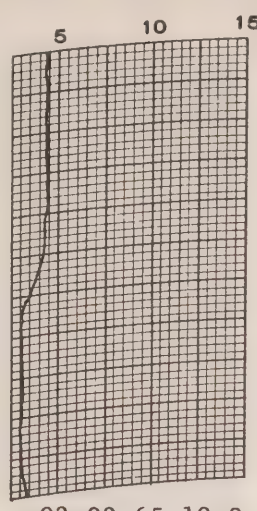
C.C.G.S. "St. Catharines", Survey P-65-1



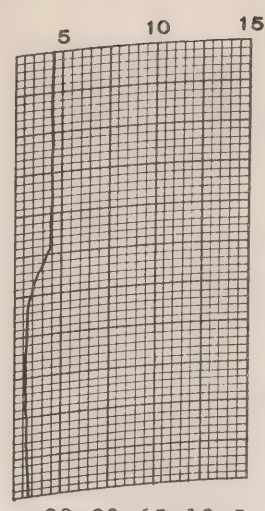
03-02-65-12.0
50°03'n
144°57'w



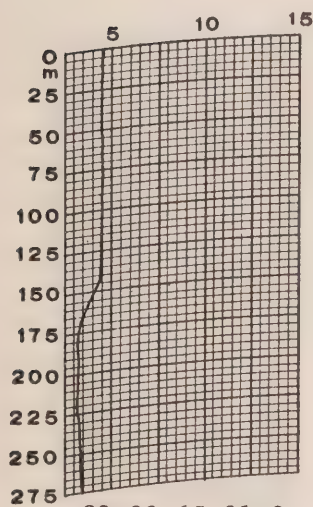
03-02-65-15.0
50°03'n
144°57'w



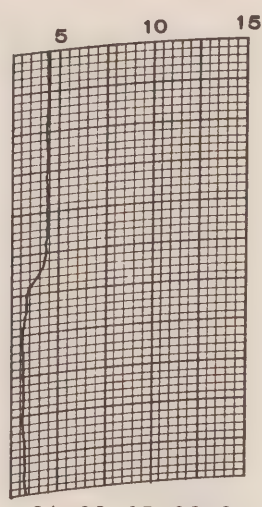
03-02-65-18.0
50°03'n
144°57'w



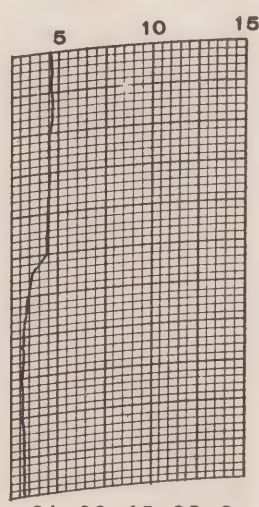
*03-02-65-18.5
50°04'n
144°53'w



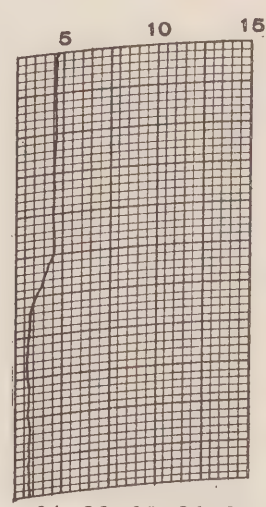
03-02-65-21.0
50°04'n
144°53'w



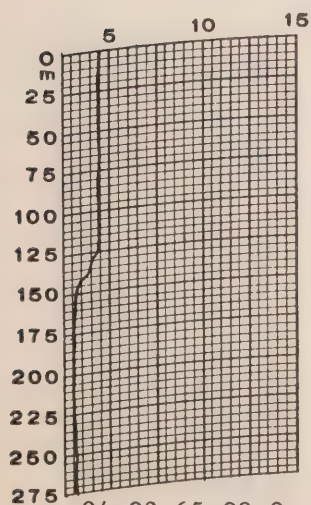
04-02-65-00.0
50°04'n
144°53'w



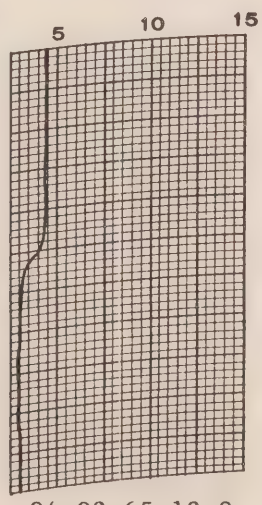
04-02-65-03.0
50°02'n
145°05'w



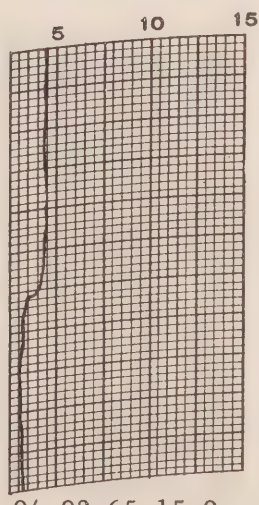
04-02-65-06.0
50°02'n
145°05'w



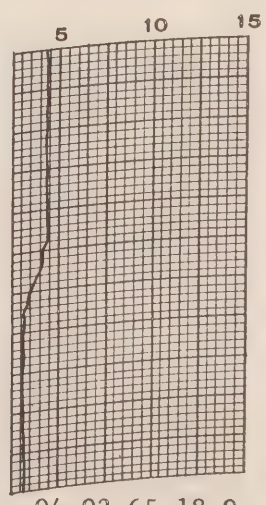
04-02-65-09.0
50°02'n
145°05'w



04-02-65-12.0
50°02'n
145°05'w

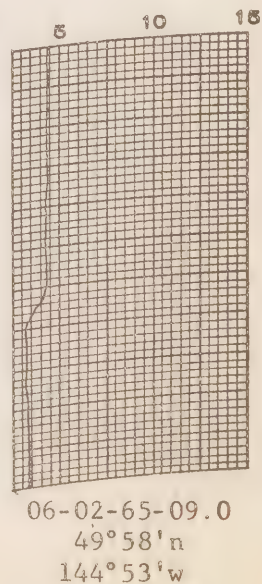
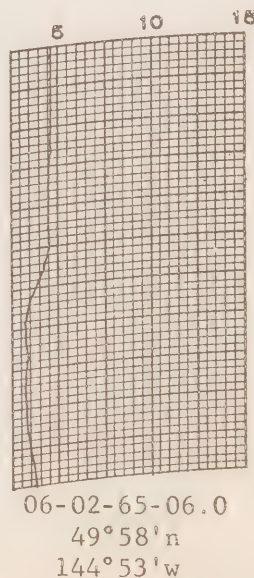
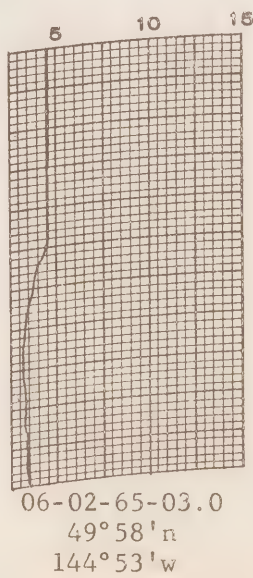
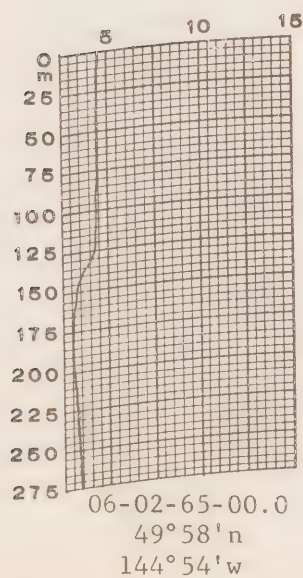
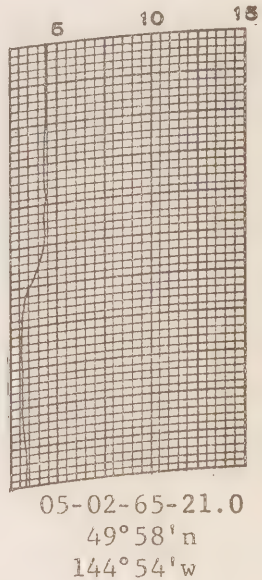
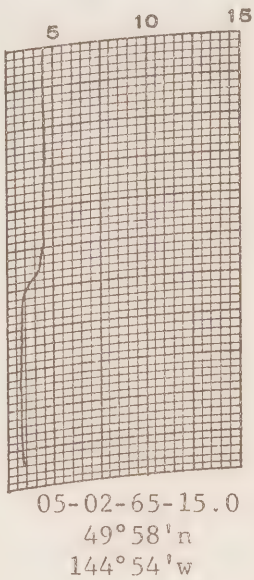
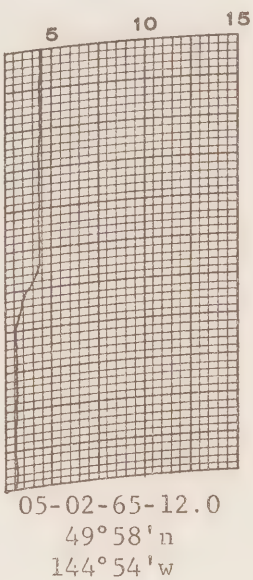
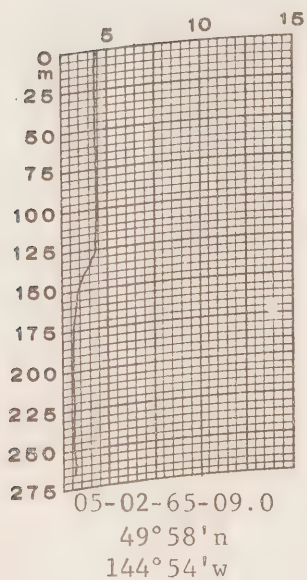
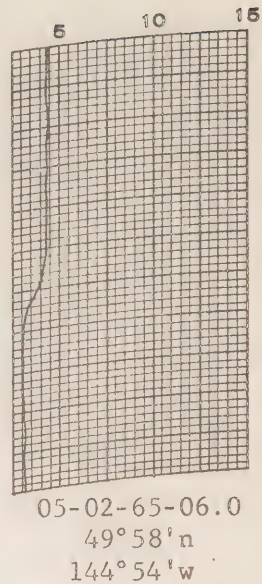
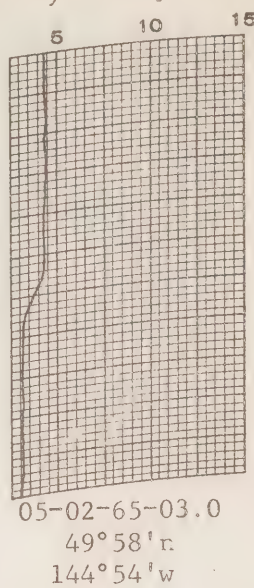
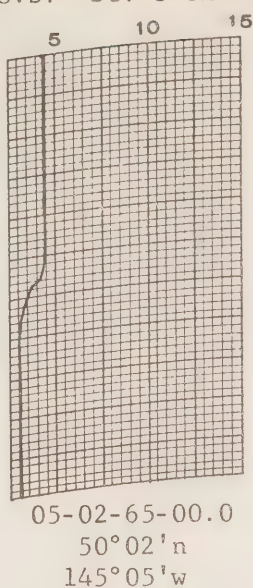
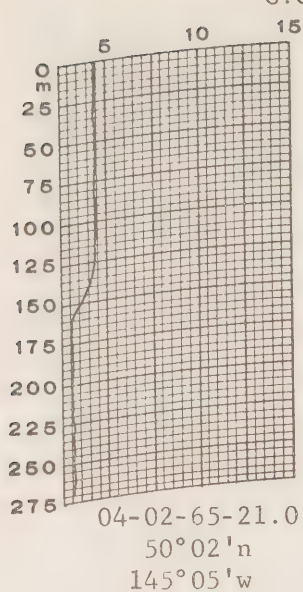


04-02-65-15.0
50°02'n
145°05'w

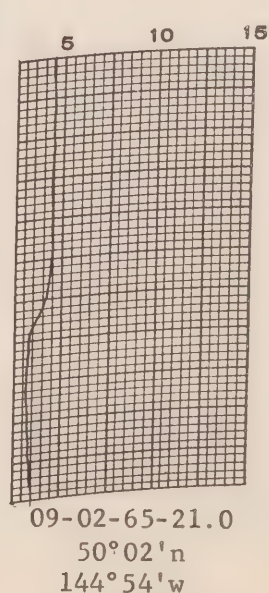
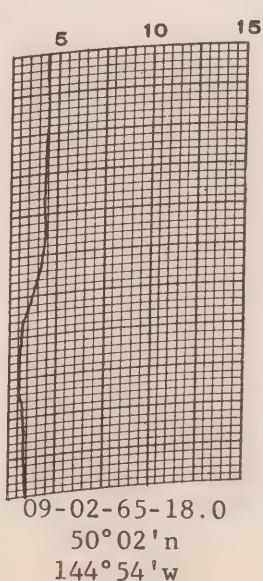
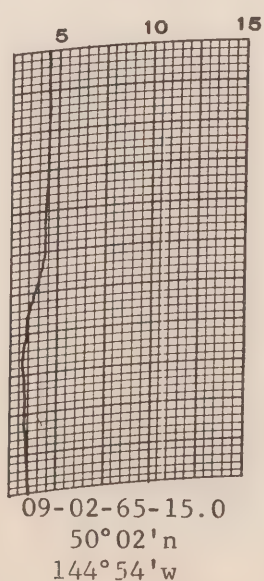
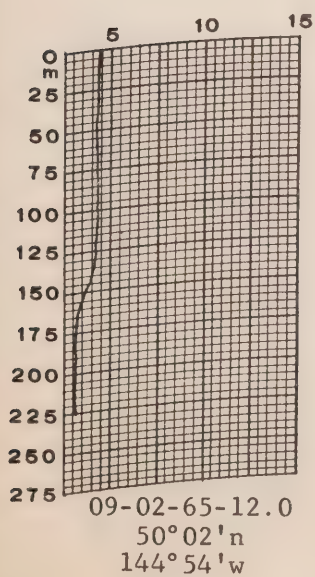
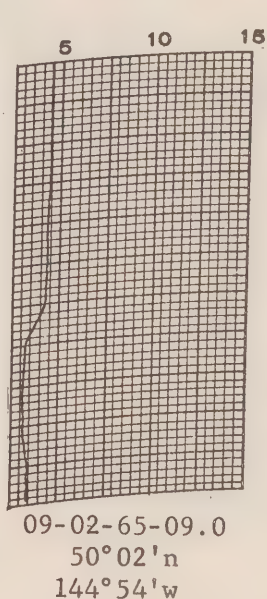
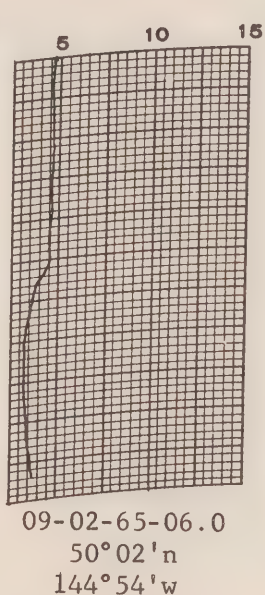
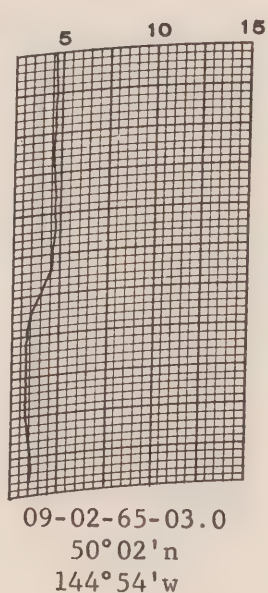
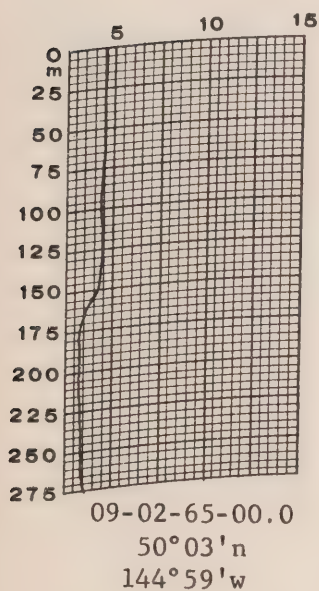
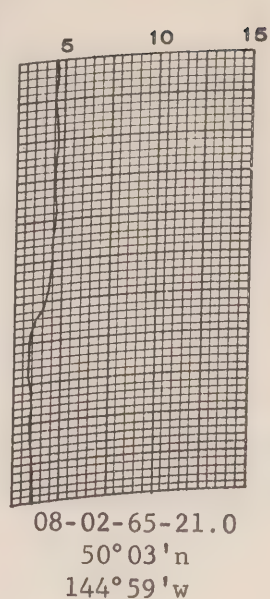
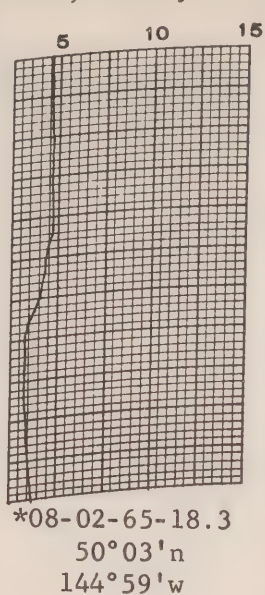
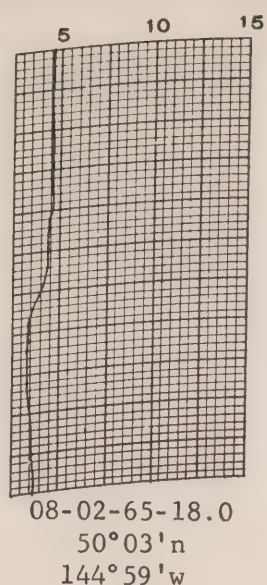
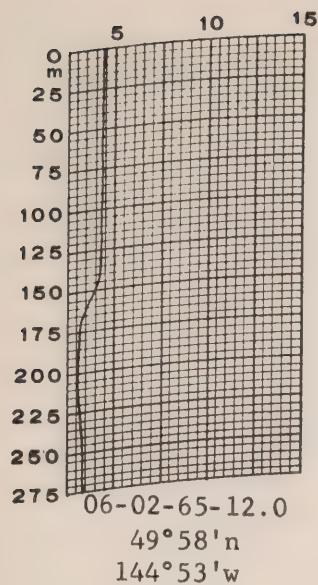


04-02-65-18.0
50°02'n
145°05'w

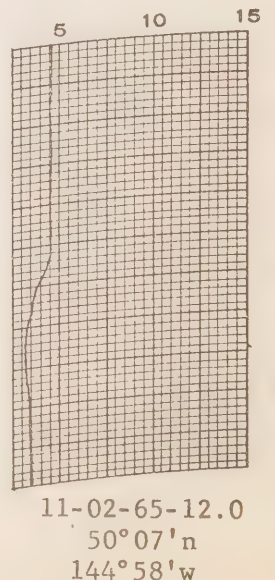
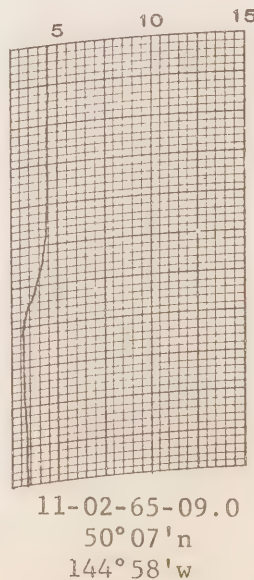
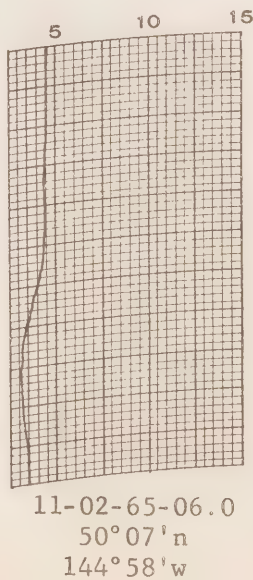
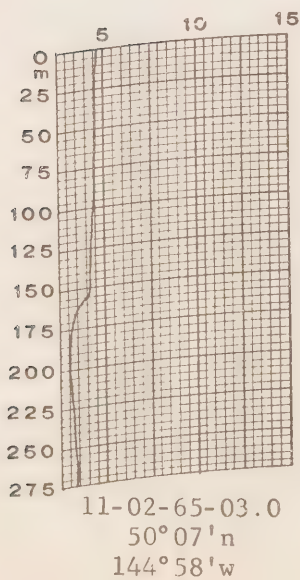
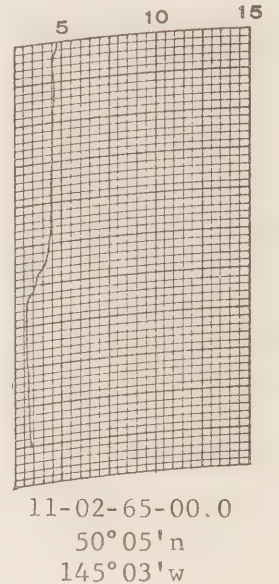
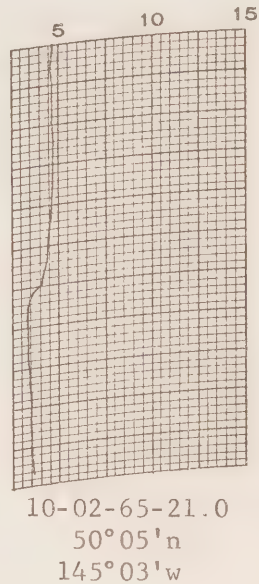
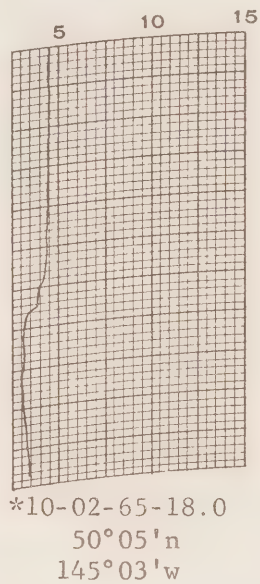
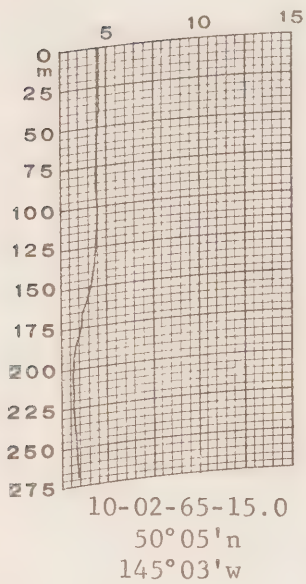
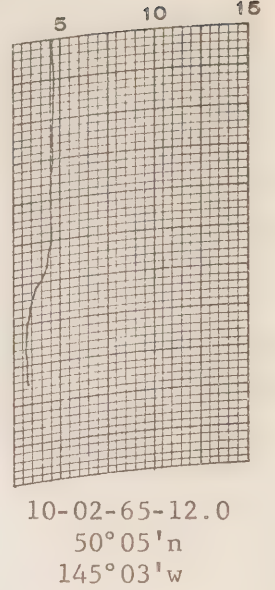
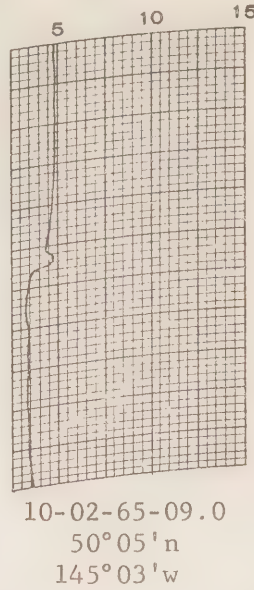
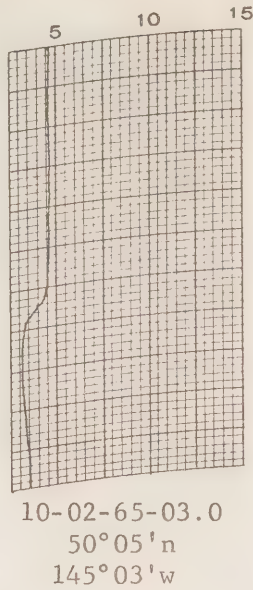
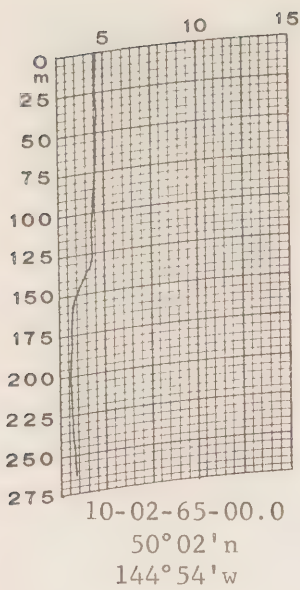
C.C.G.S. "St. Catharines", Survey P-65-1



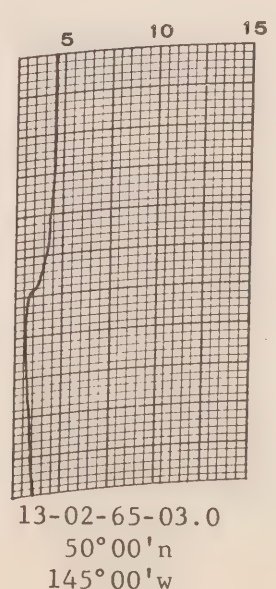
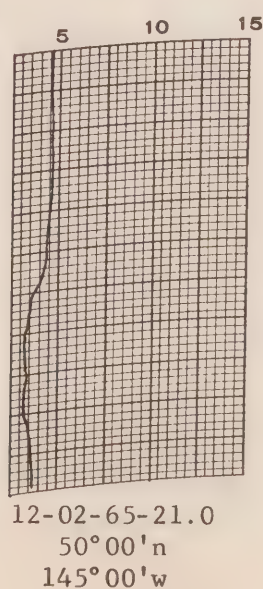
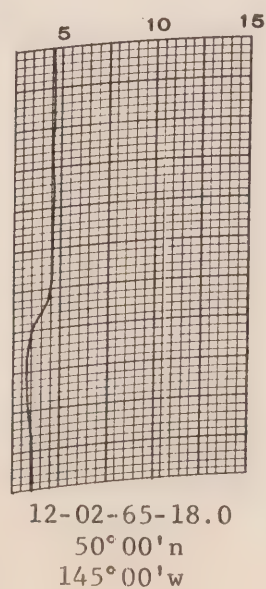
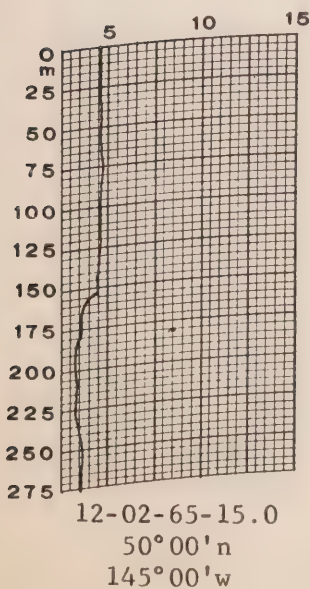
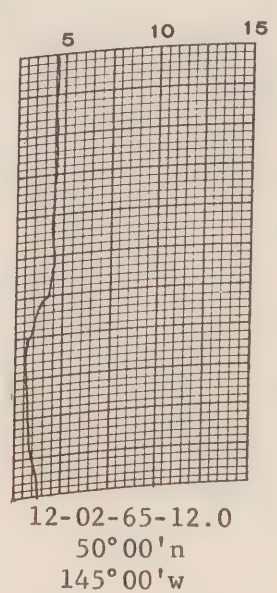
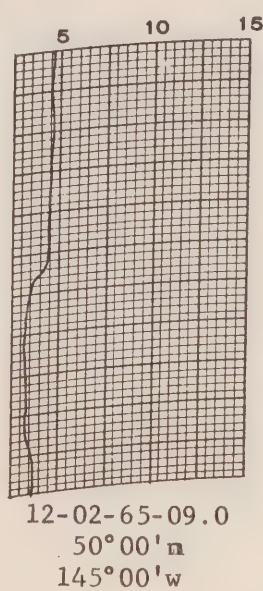
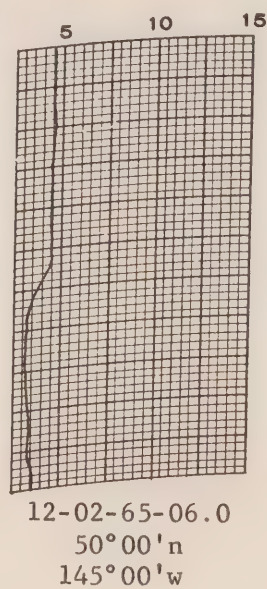
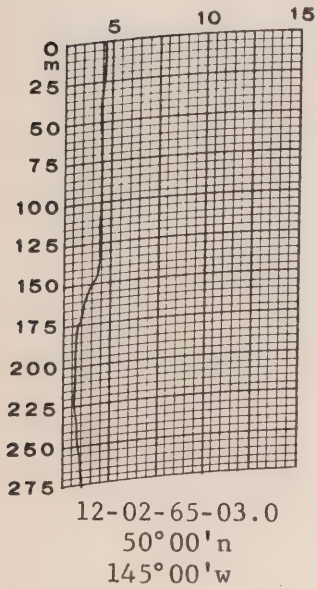
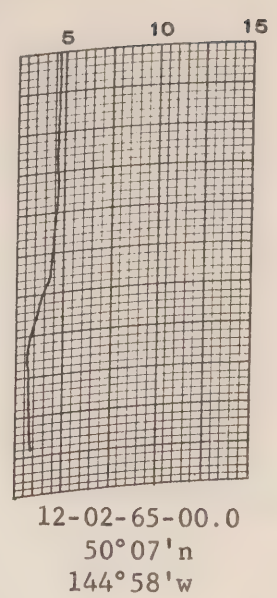
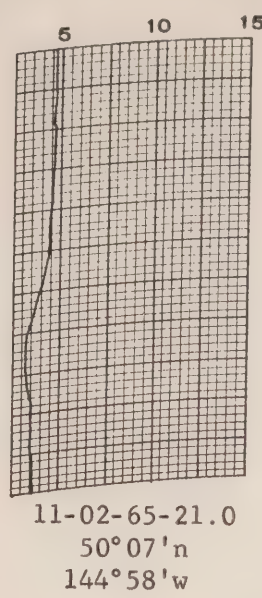
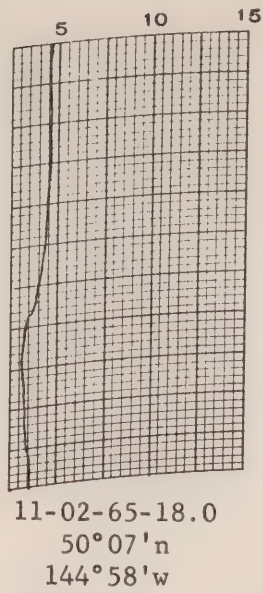
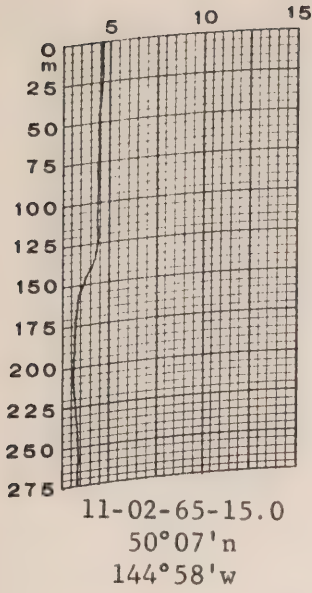
C.C.G.S. "St. Catharines", Survey P-65-1



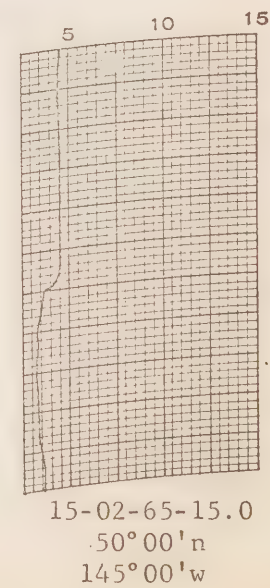
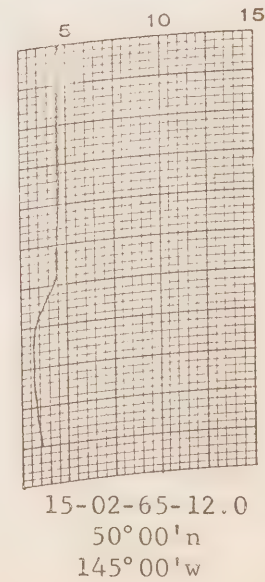
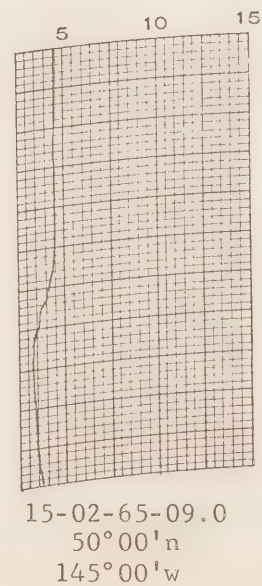
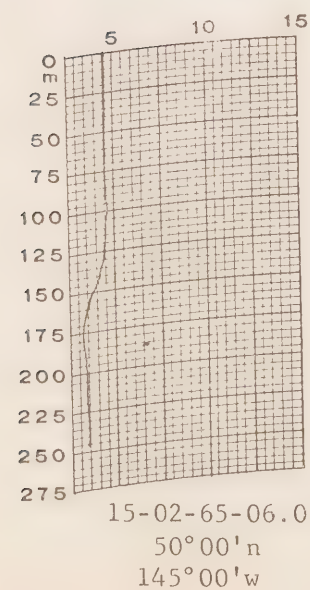
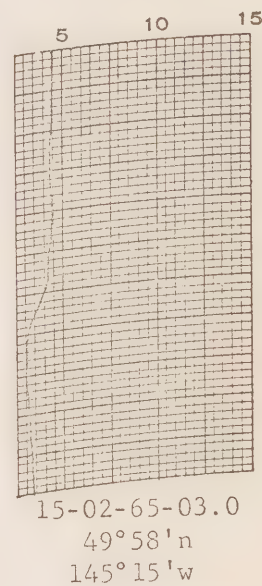
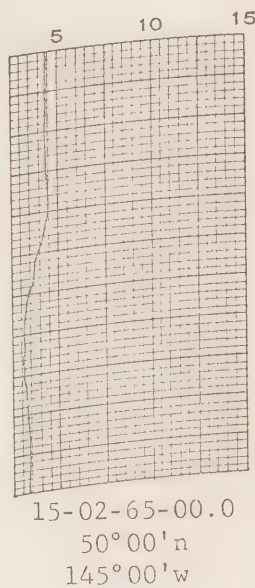
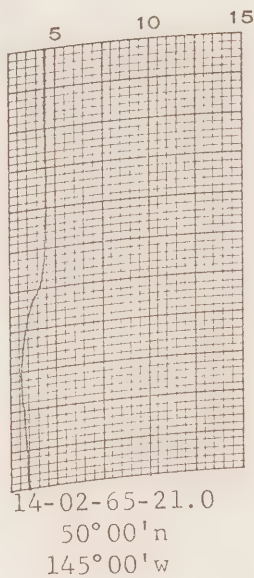
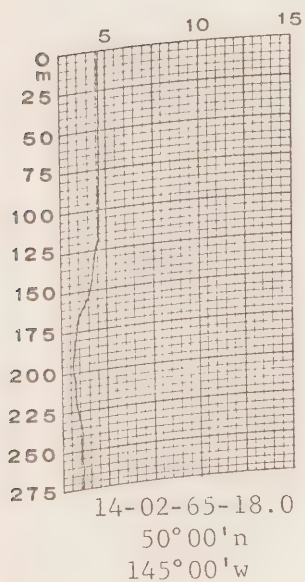
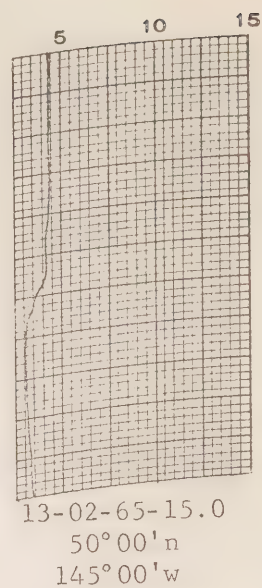
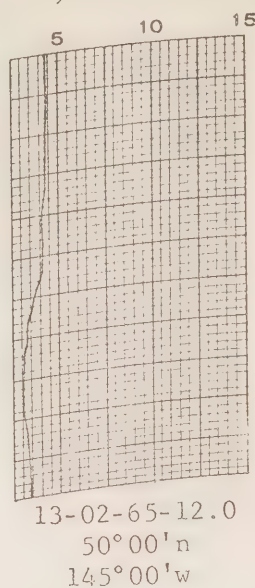
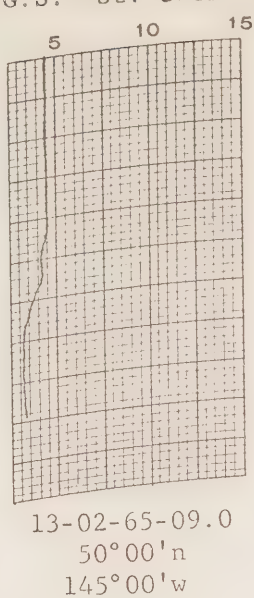
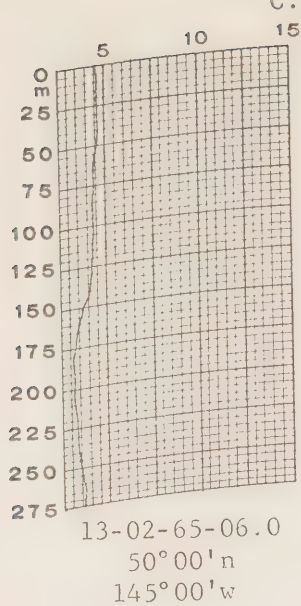
C.C.G.S. "St. Catharines", Survey P-65-1

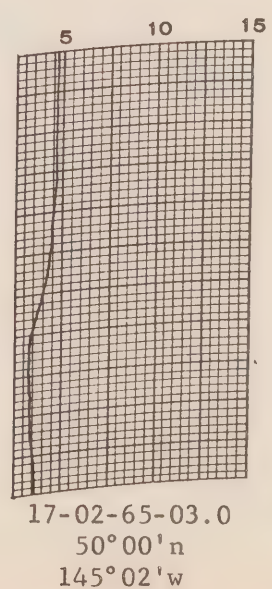
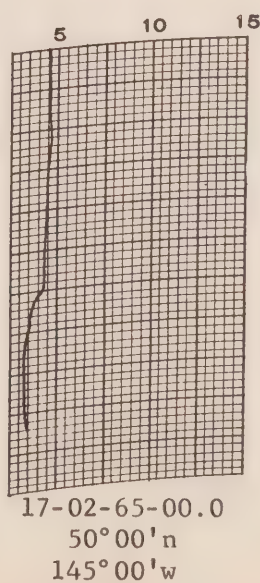
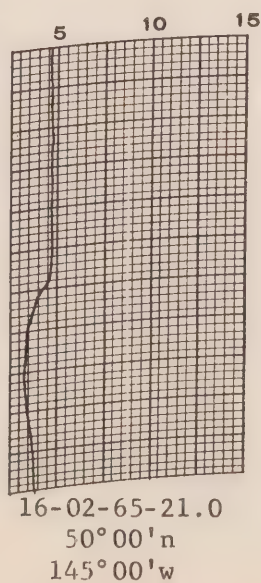
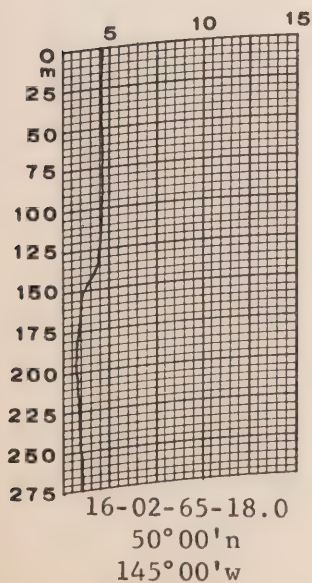
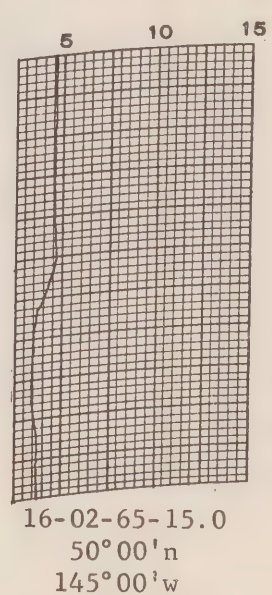
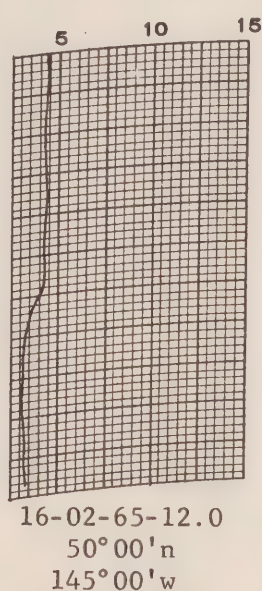
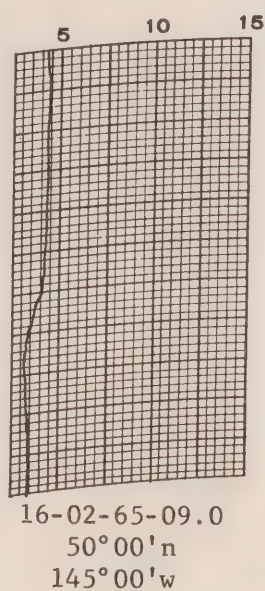
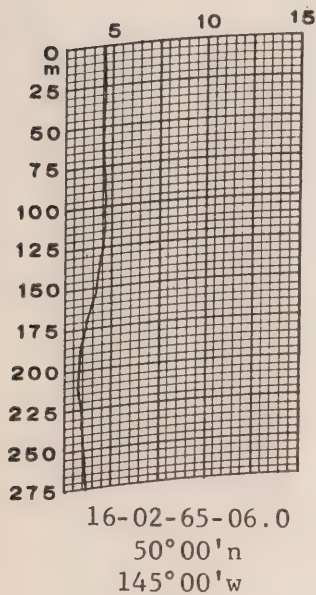
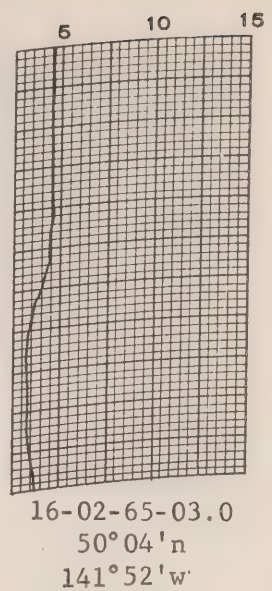
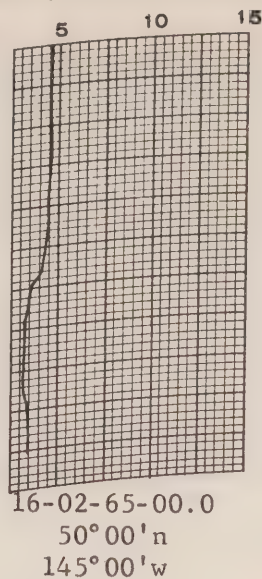
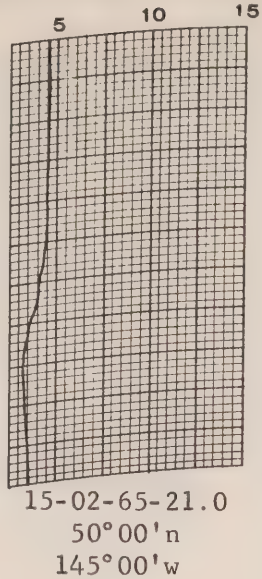
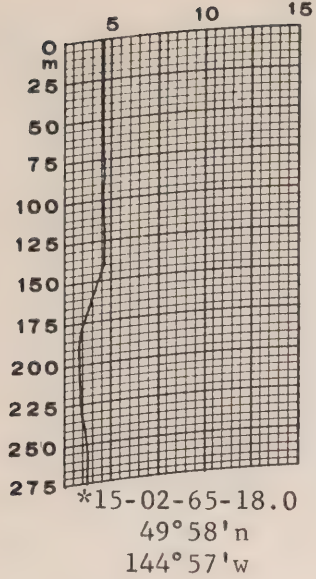


C.C G.S. "St. Catharines", Survey P-65-1

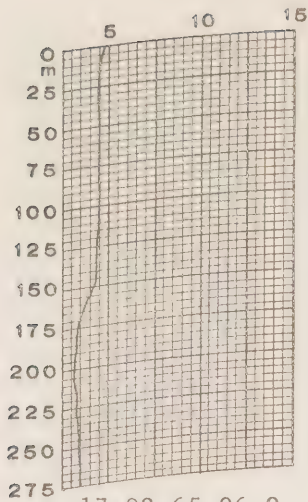


C.C.G.S. "St. Catharines", Survey P-65-1

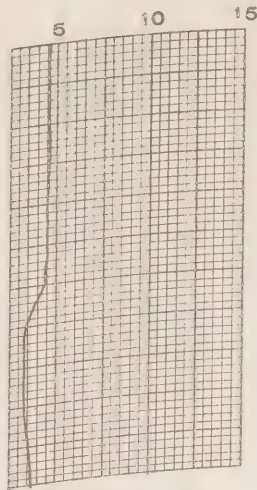




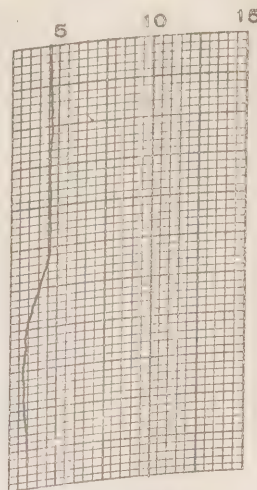
C.C.G.S. "St. Catharines", Survey P-65-1



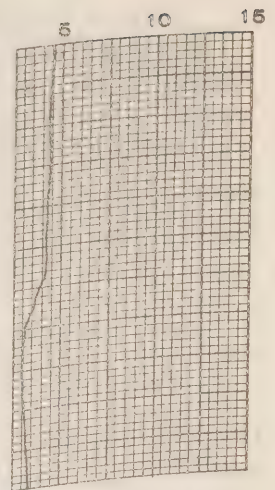
17-02-65-06.0
50°00'n
145°00'w



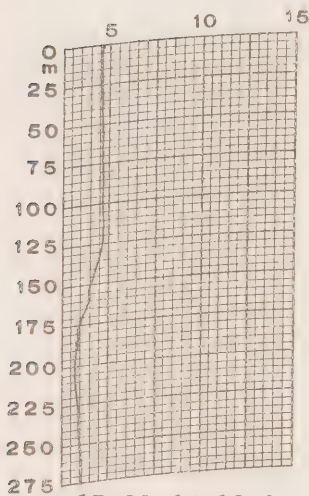
17-02-65-09.0
50°00'n
145°00'w



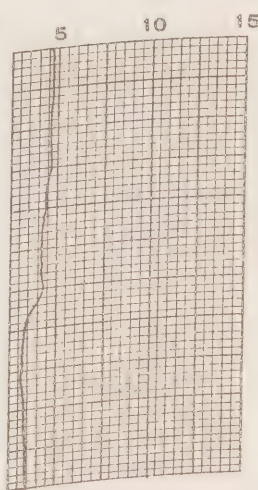
17-02-65-12.0
50°00'n
145°00'w



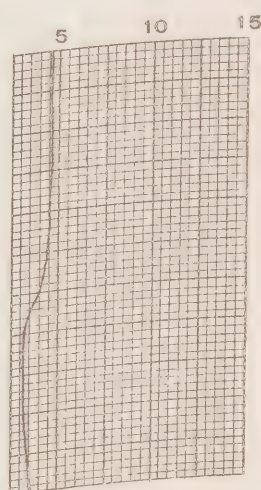
17-02-65-15.0
50°00'n
145°00'w



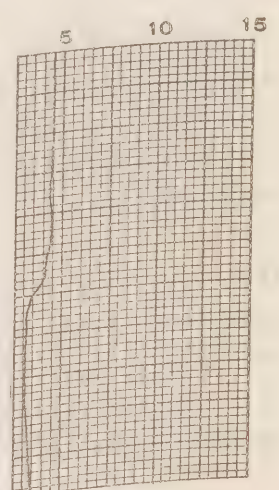
17-02-65-18.0
50°00'n
145°00'w



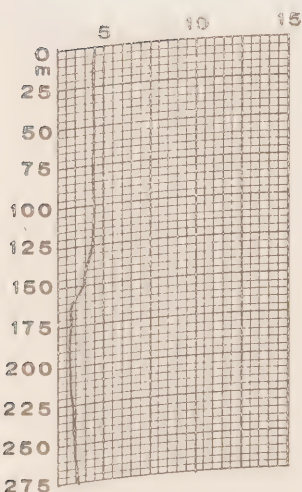
17-02-65-21.0
50°00'n
145°00'w



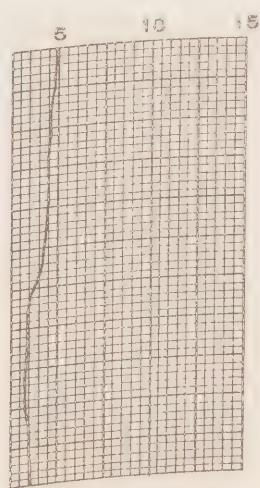
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50°00'n
145°00'w



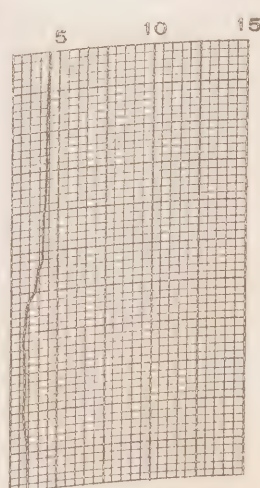
18-02-65-03.0
50°11'n
144°56'w



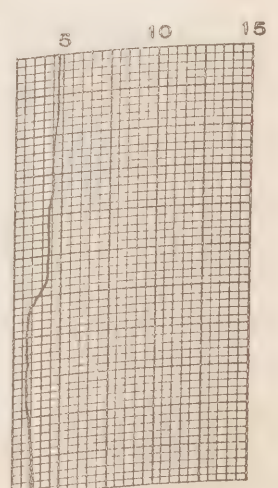
18-02-65-06.0
50°00'n
145°00'w



18-02-65-09.0
50°00'n
145°00'w

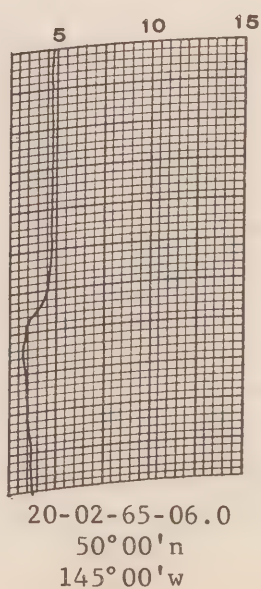
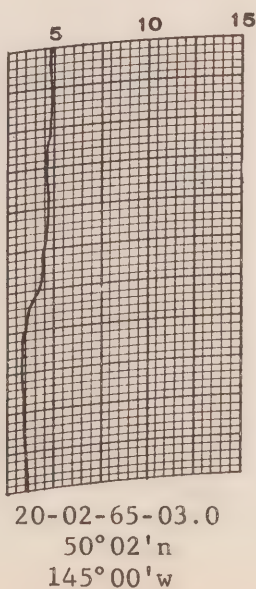
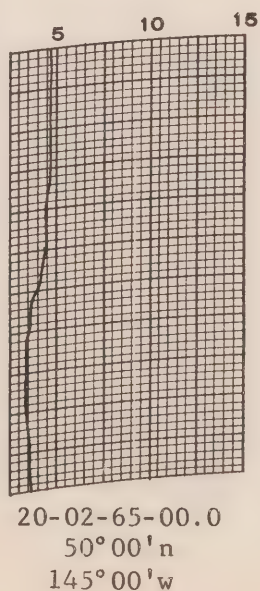
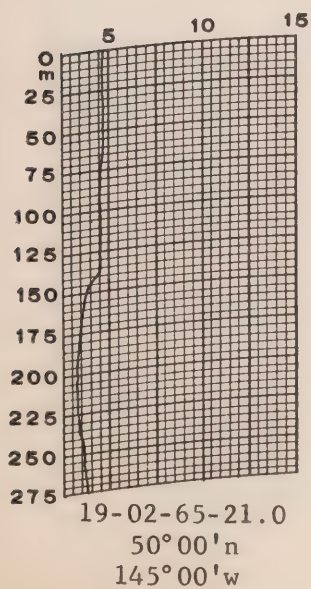
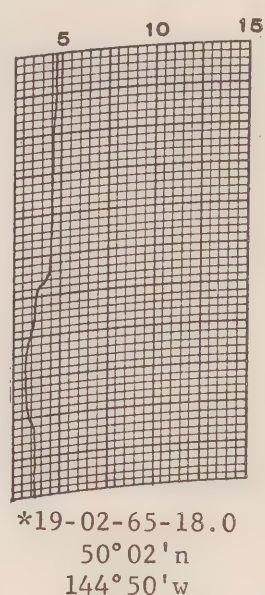
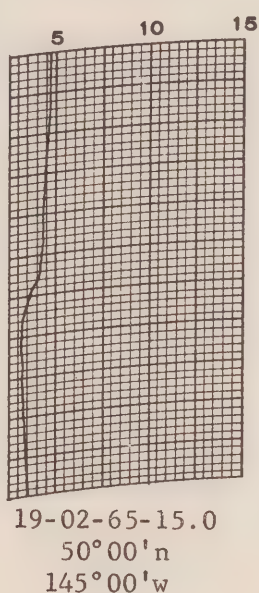
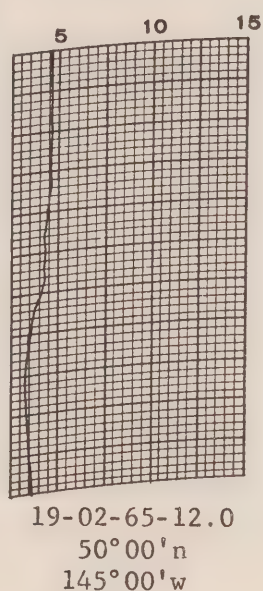
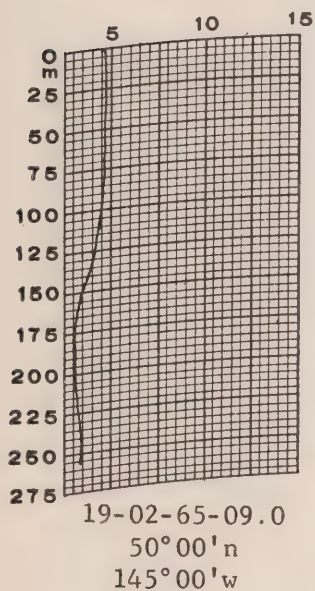
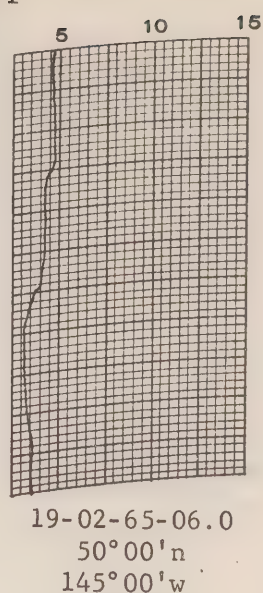
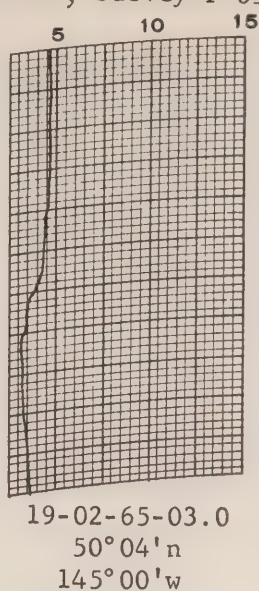
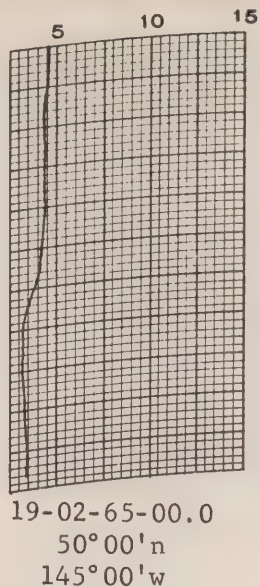
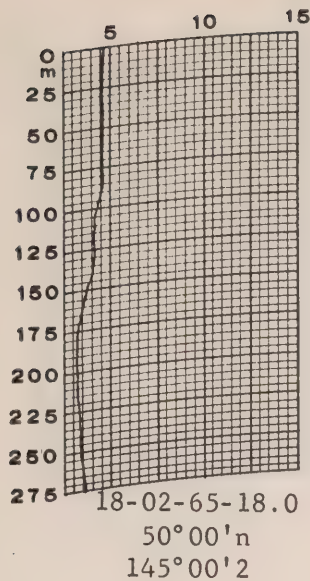


18-02-65-12.0
50°00'n
145°00'w

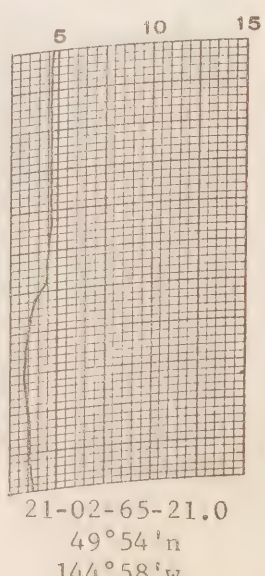
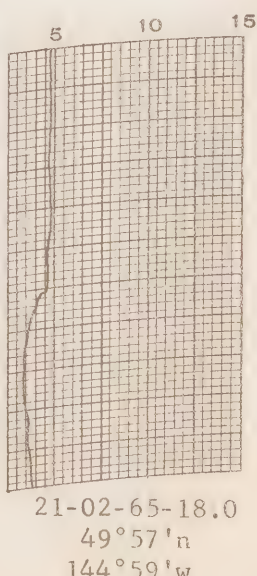
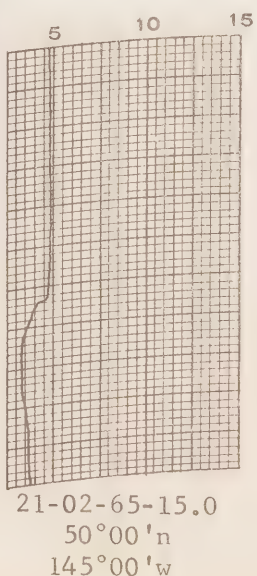
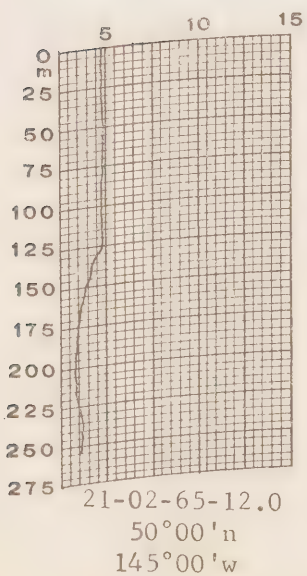
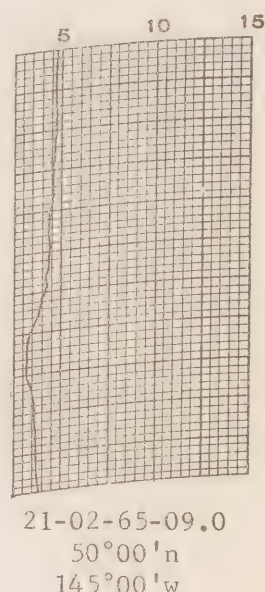
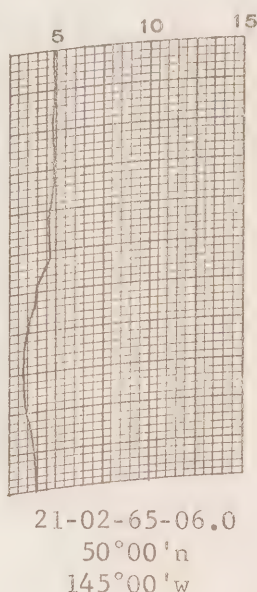
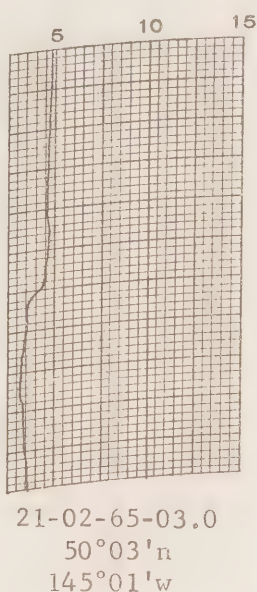
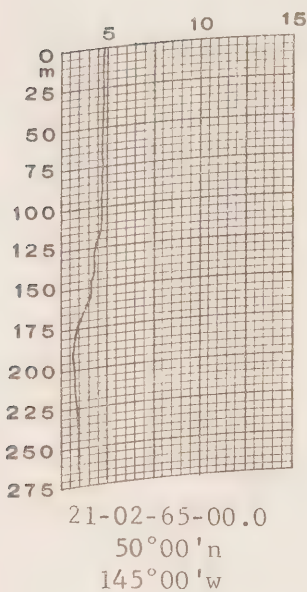
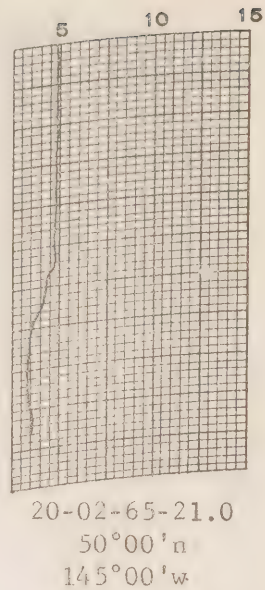
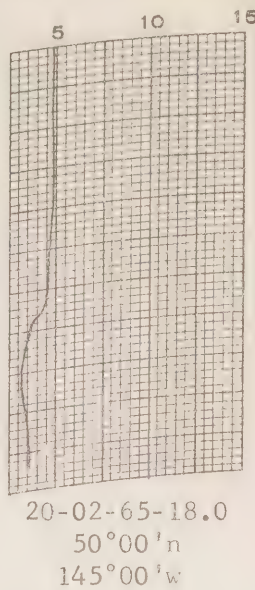
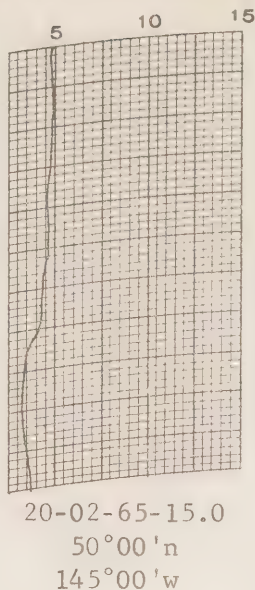
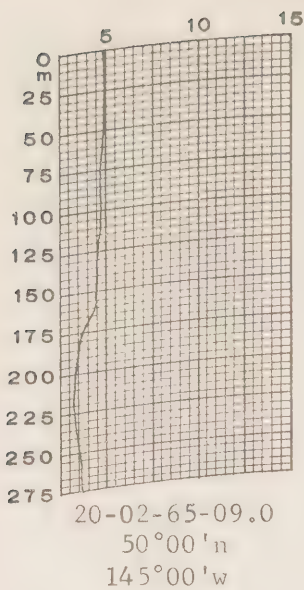


18-02-65-15.0
50°00'n
145°00'w

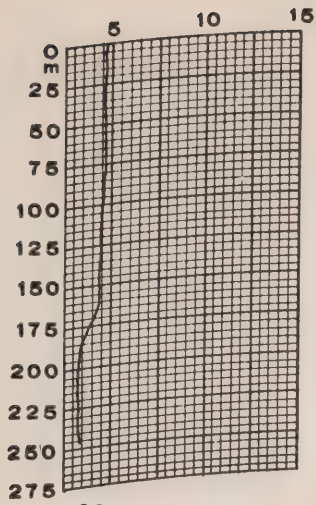
C.C.G.S. "St. Catharines", Survey P-65-1



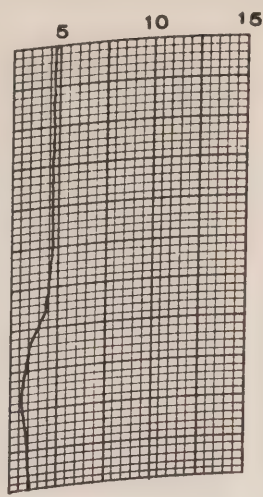
C.C.G.S. "St. Catharines", Survey P-65-1



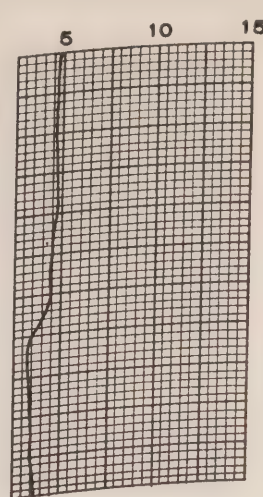
C.C.G.S. "St. Catharines", Survey P-65-1



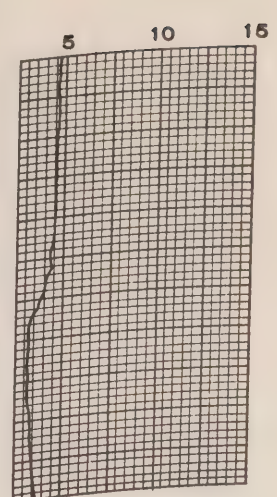
22-02-65-00.0
49°56'n
144°54'w



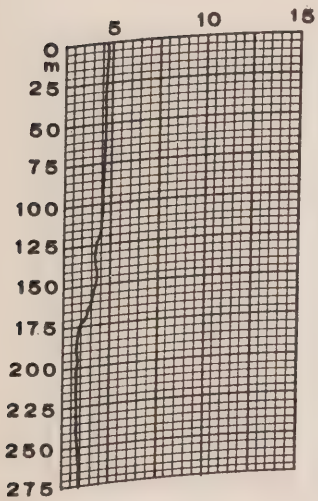
22-02-65-03.0
49°59'n
145°05'w



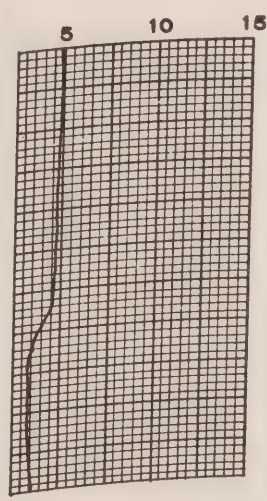
22-02-65-06.0
50°00'n
145°02'w



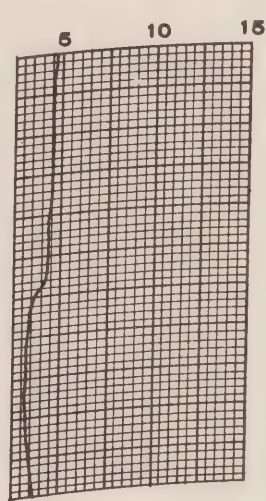
22-02-65-09.0
50°03'n
145°01'w



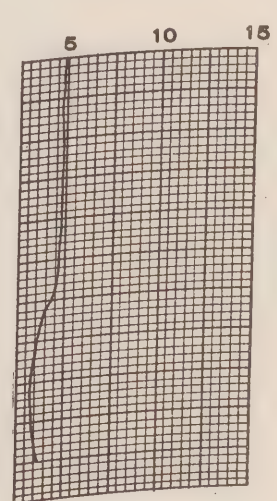
22-02-65-12.0
50°05'n
144°56'w



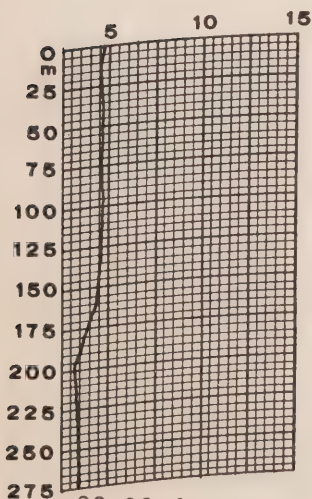
22-02-65-15.0
49°59'n
144°54'w



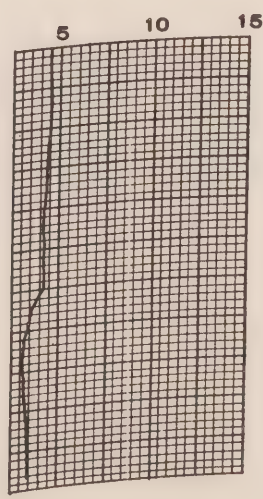
22-02-65-18.0
49°57'n
144°51'w



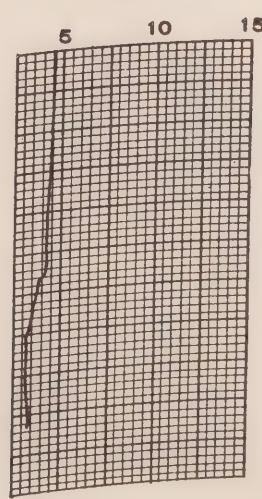
22-02-65-21.0
49°56'n
144°53'w



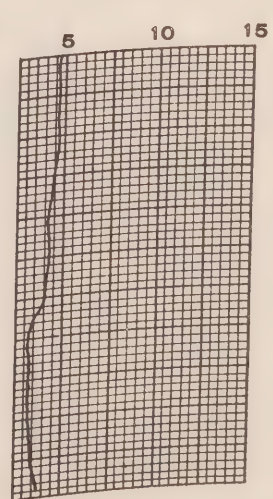
23-02-65-00.0
49°53'n
145°08'w



23-02-65-03.0
49°50'n
145°17'w

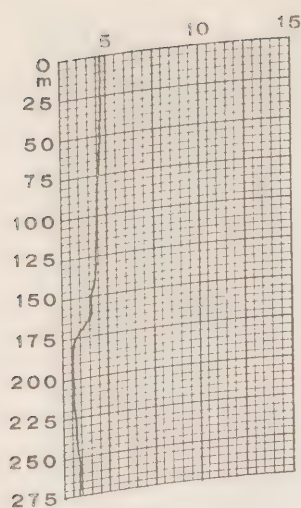


23-02-65-06.0
49°50'n
145°22'w

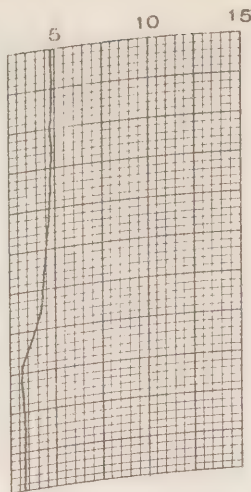


23-02-65-09.0
50°03'n
145°05'w

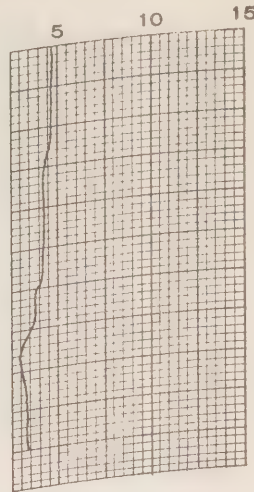
C.C.G.S. "St. Catharines", Survey P-65-1



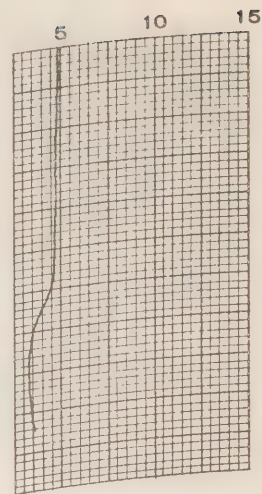
23-02-65-12.0
50°01'n
144°52'w



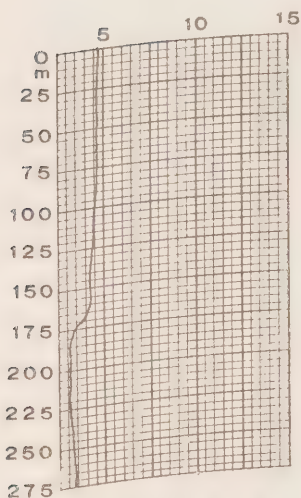
23-02-65-15.0
49°54'n
145°02'w



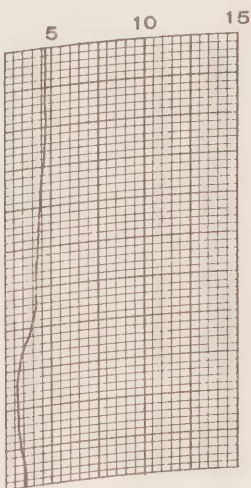
23-02-65-18.0
49°53'n
145°11'w



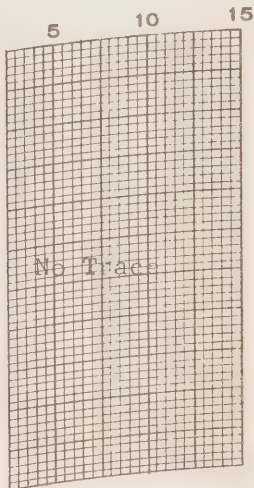
23-02-65-21.0
49°55'n
145°06'w



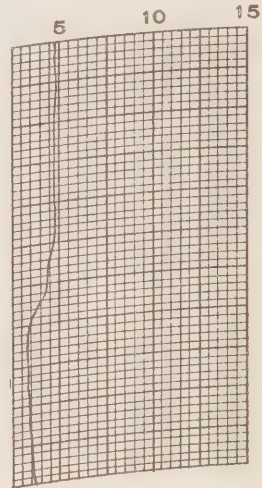
24-02-65-00.0
49°55'n
144°51'w



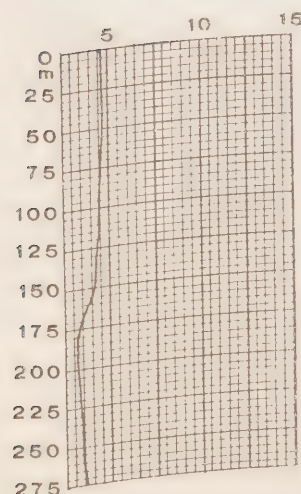
24-02-65-03.0
50°01'n
145°05'w



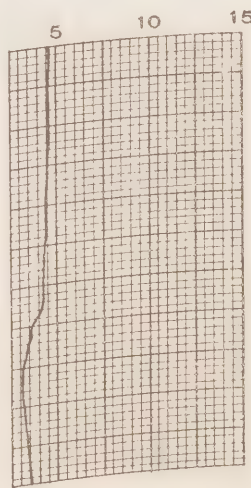
24-02-65-06.0
49°57'n
145°16'w



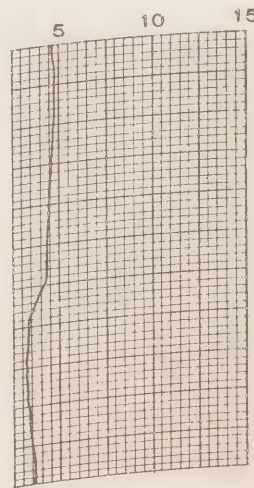
24-02-65-09.0
50°03'n
145°01'w



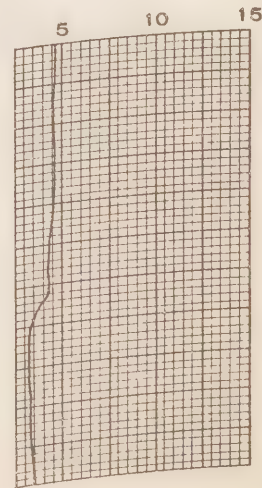
24-02-65-12.0
50°01'n
145°00'w



24-02-65-15.0
50°01'n
145°00'w

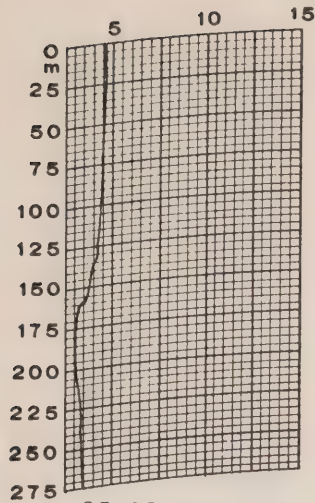


24-02-65-18.0
50°00'n
144°57'w

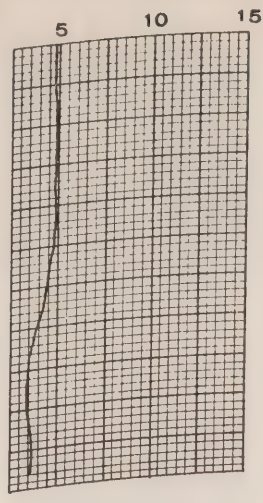


24-02-65-21.0
50°02'n
144°58'w

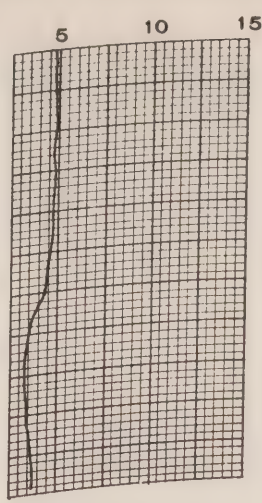
C.C.G.S. "St. Catharines", Survey P-65-1



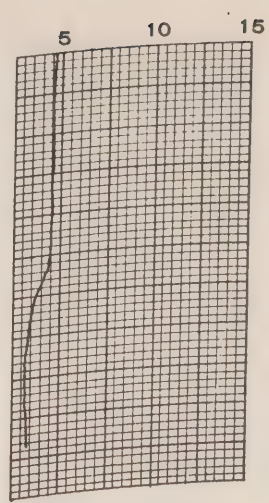
25-02-65-00.0
50°03'N
145°05'W



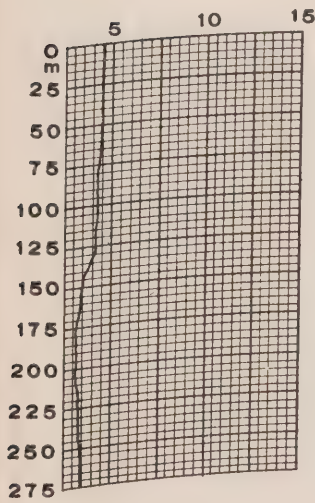
25-02-65-03.0
50°00'N
144°55'W



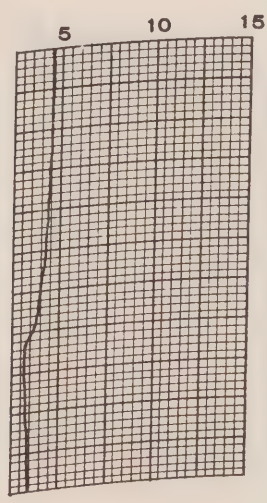
25-02-65-06.0
49°58'N
144°47'W



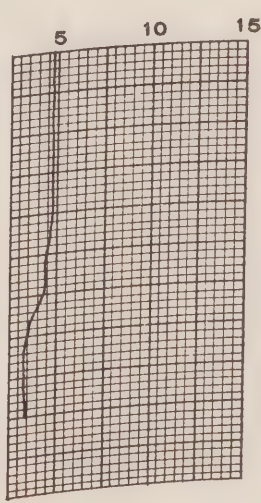
25-02-65-09.0
50°02'N
144°58'W



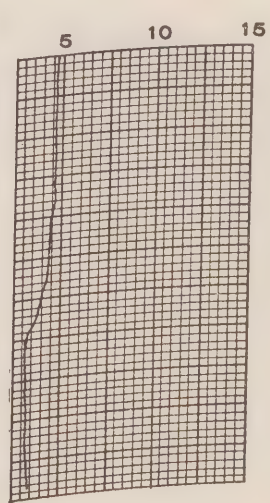
25-02-65-12.0
49°58'N
145°05'W



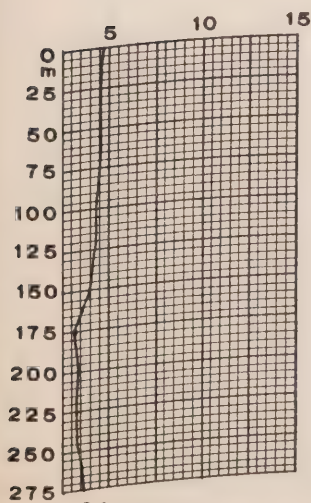
25-02-65-15.0
49°58'N
145°02'W



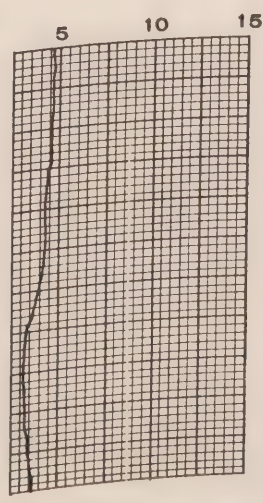
25-20-65-18.0
49°55'N
144°52'W



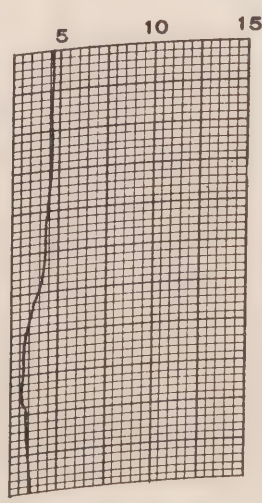
25-02-65-21.0
50°01'N
144°54'W



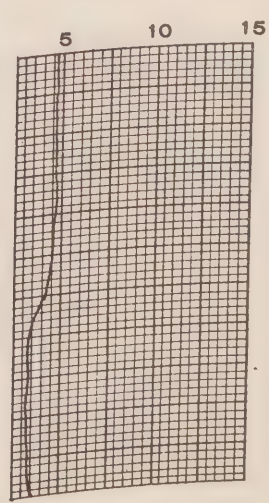
26-02-65-00.0
50°03'N
145°07'W



26-02-65-03.0
50°01'N
145°03'W

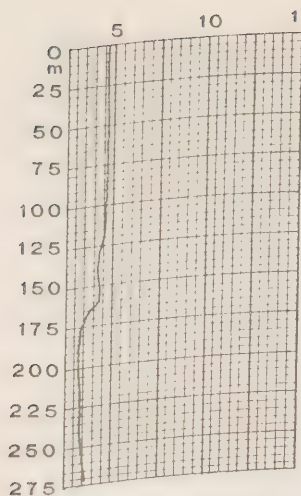


26-02-65-06.0
50°00'N
145°00'W

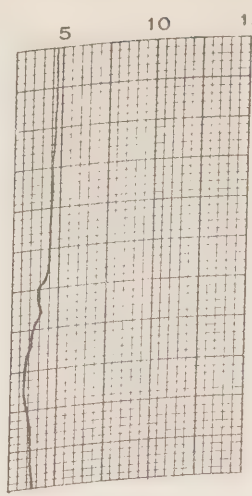


26-02-65-09.0
50°04'N
144°58'W

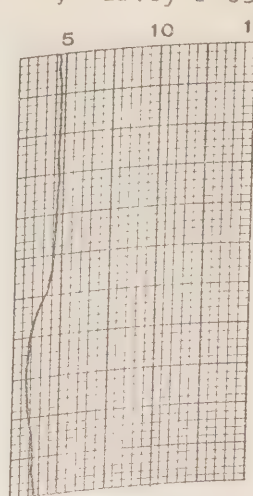
C.C.G.S. "St. Catharines", Survey P-65-1



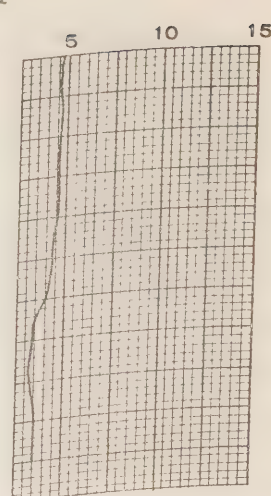
26-02-65-12.0
50°04'N
144°55'W



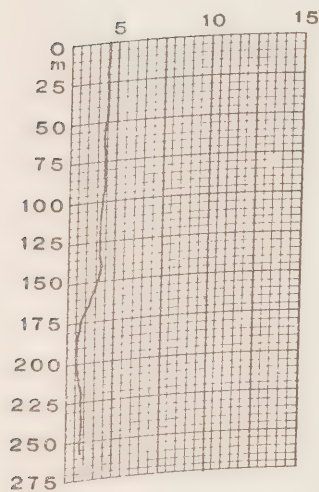
26-02-65-15.0
50°03'N
144°46'W



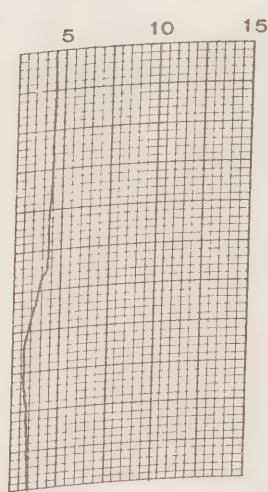
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50°00'N
144°52'W



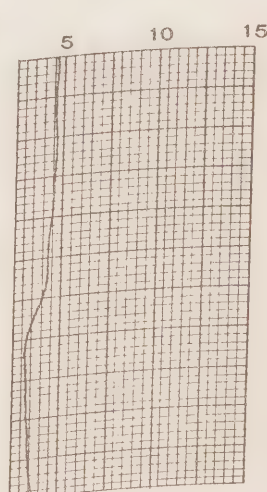
26-02-65-21.0
50°03'N
144°46'W



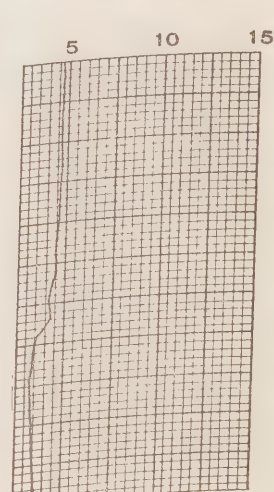
27-02-65-00.0
50°03'N
144°56'W



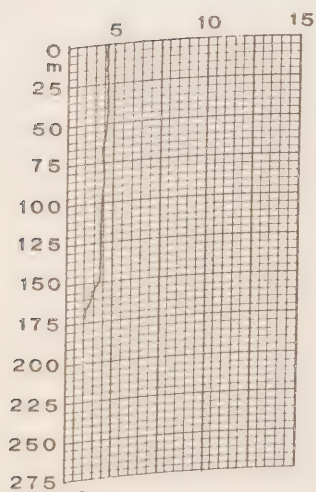
27-02-65-03.0
49°58'N
144°59'W



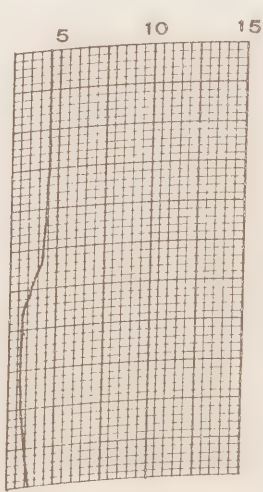
27-02-65-06.0
49°56'N
144°54'W



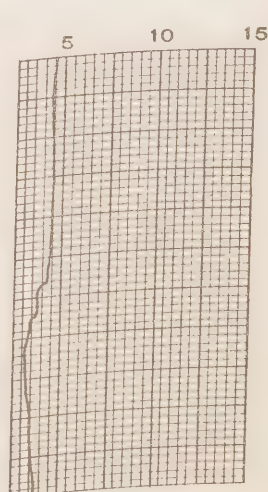
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49°55'N
144°53'W



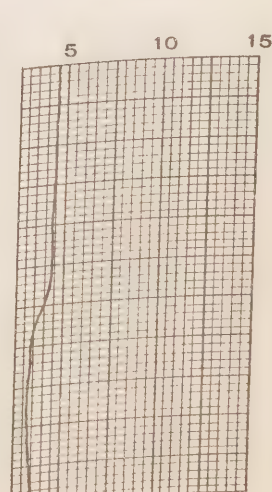
27-02-65-12.0
49°55'N
144°55'W



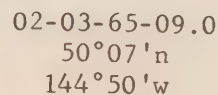
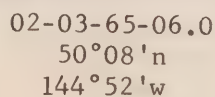
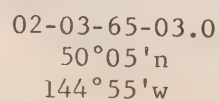
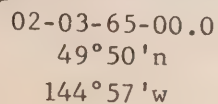
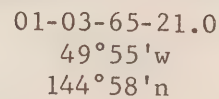
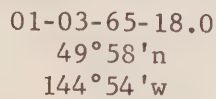
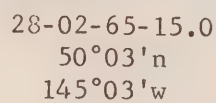
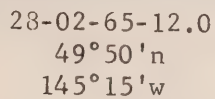
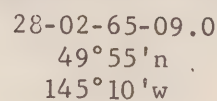
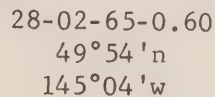
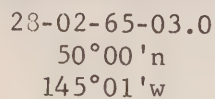
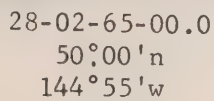
27-02-65-15.0
50°05'N
145°05'W



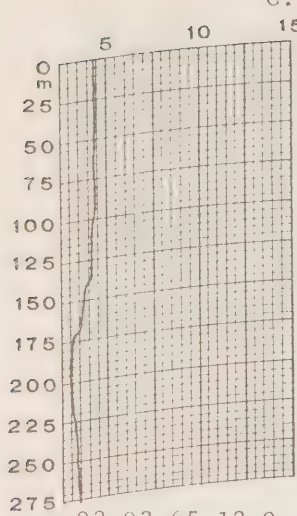
27-02-65-18.0
50°02'N
145°00'W



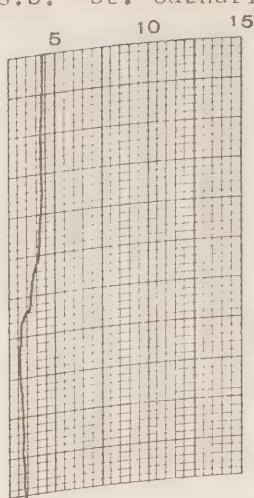
27-02-65-21.0
50°05'N
144°58'W



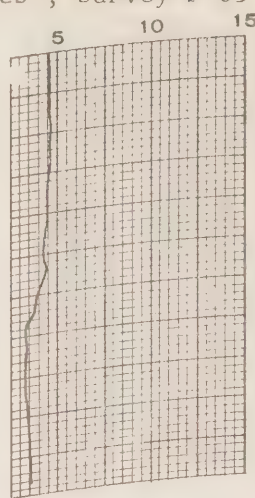
C.C.G.S. "St. Catharines", Survey P-65-1



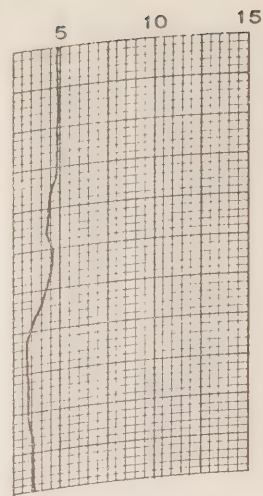
02-03-65-12.0
50°00'N
145°00'W



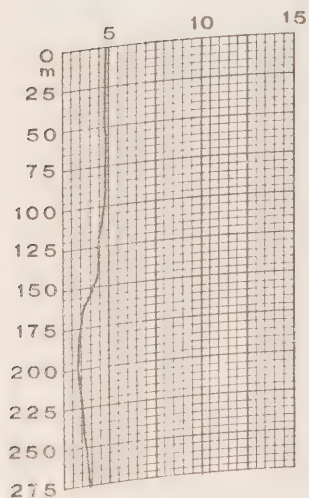
02-03-65-15.0
49°57'N
144°54'W



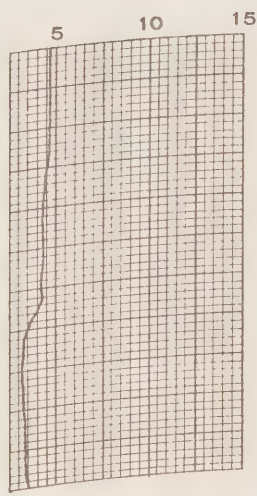
03-03-65-18.0
50°03'N
144°47'W



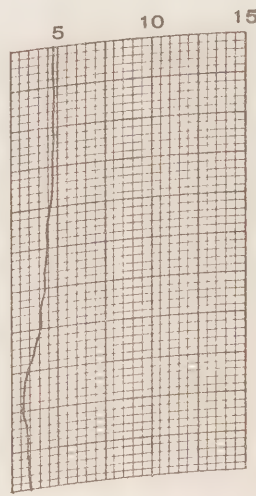
03-03-65-21.0
49°52'N
144°47'W



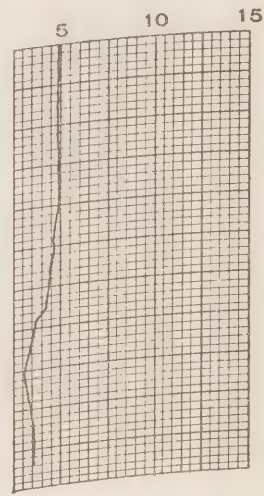
04-03-65-00.0
49°55'N
144°51'W



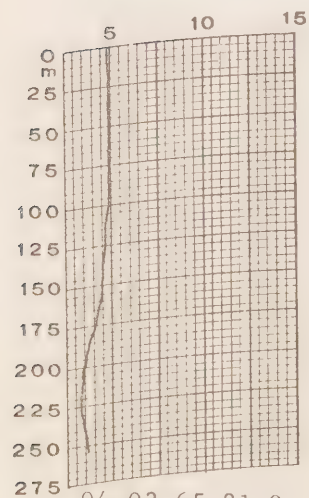
04-03-65-03.0
49°54'N
144°46'W



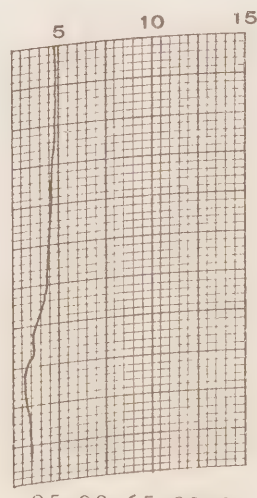
04-03-65-06.0
49°52'N
144°47'W



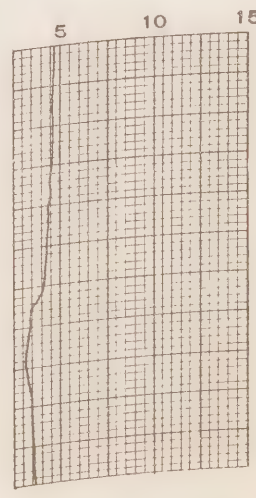
04-03-65-18.0
49°36'N
144°42'W



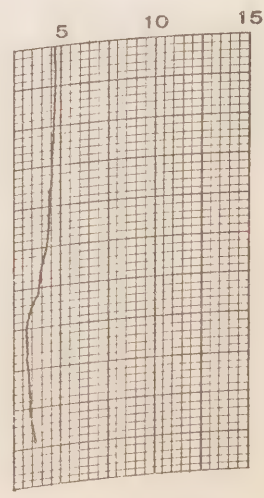
04-03-65-21.0
49°51'N
144°45'W



05-03-65-00.0
49°57'N
144°59'W

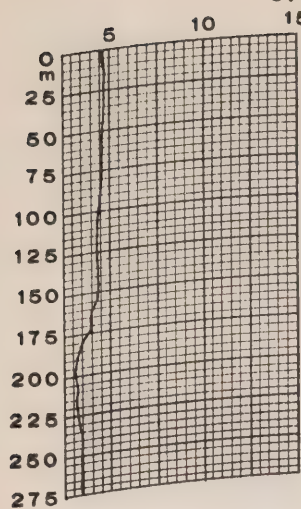


05-03-65-03.0
50°05'N
145°04'W

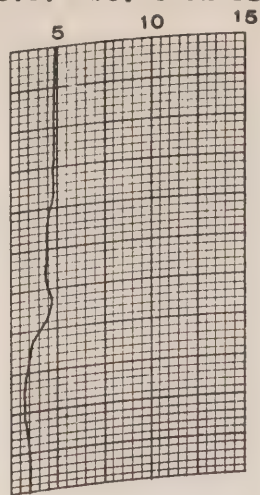


05-03-65-06.0
50°10'N
145°01'W

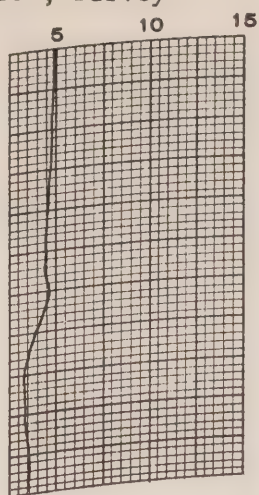
C.C.G.S. "St. Catharines", Survey P-65-1



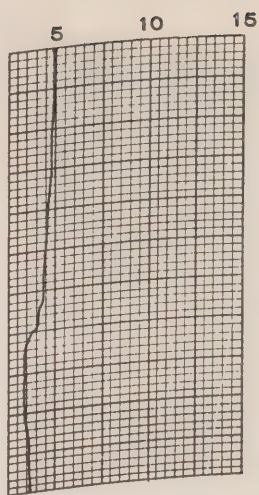
05-03-65-09.0
50°02'N
145°00'W



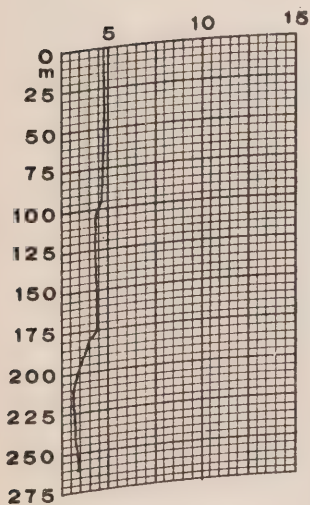
05-03-65-12.0
49°50'N
145°00'W



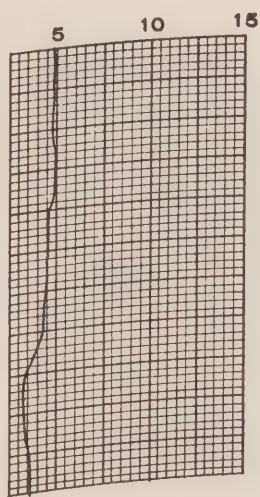
05-03-65-15.0
49°55'N
145°00'W



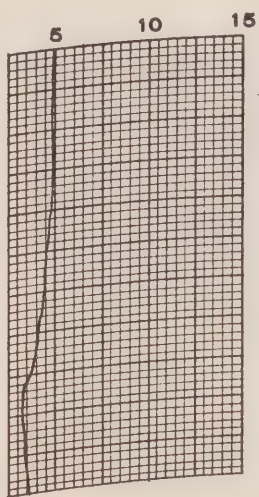
05-03-65-18.0
50°00'N
145°00'W



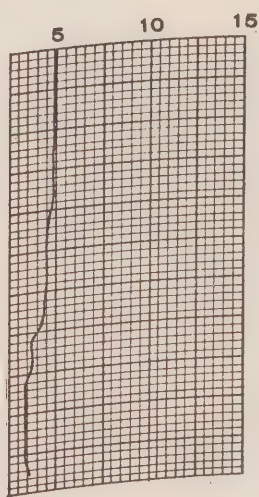
05-03-65-21.0
49°55'N
145°00'W



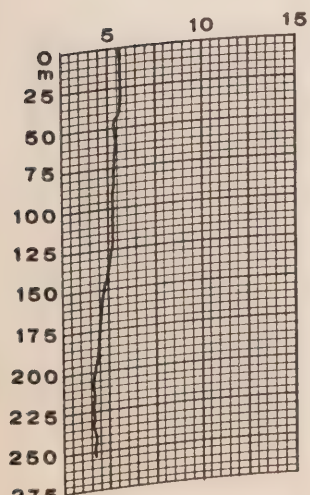
06-03-65-00.0
49°50'N
144°57'W



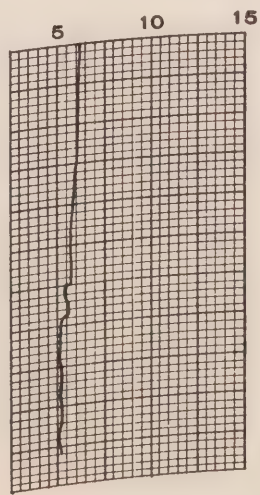
06-03-65-03.0
49°45'N
145°00'W



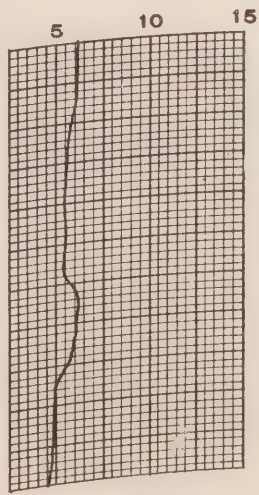
06-03-65-06.0
49°39'N
145°02'W



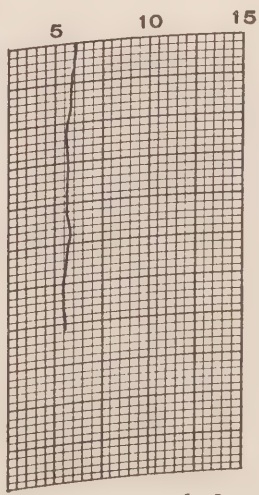
08-03-65-20.8
49°40'N
140°40'W



08-03-65-23.8
49°37'N
139°40'W

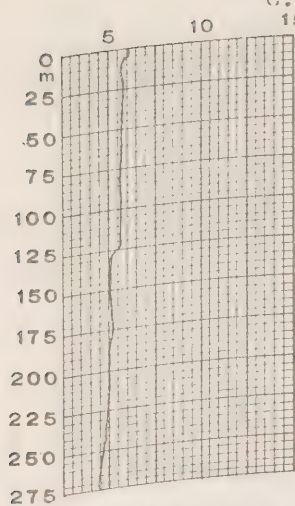


09-03-65-02.8
49°34'N
138°40'W

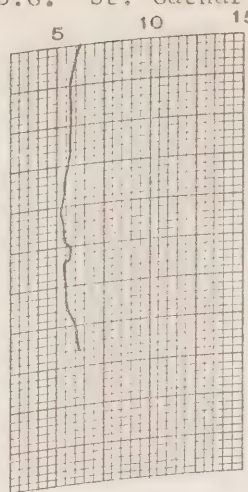


09-03-65-06.3
49°28'N
137°40'W

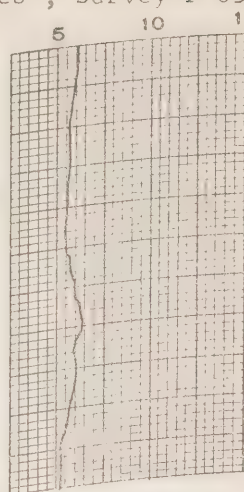
C.C.S.G. "St. Catharines", Survey P-65-1



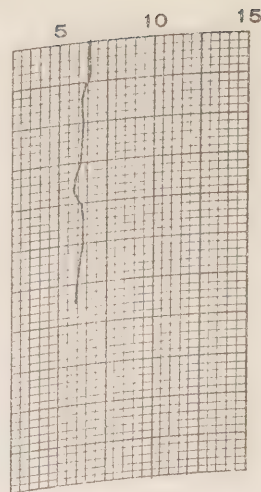
09-03-65-09.5
49°26'N
136°40'W



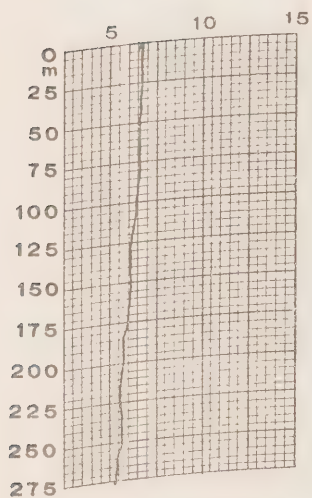
09-03-65-13.2
49°25'N
135°40'W



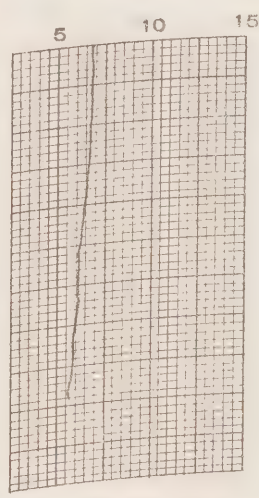
09-03-65-16.1
49°19'N
134°40'W



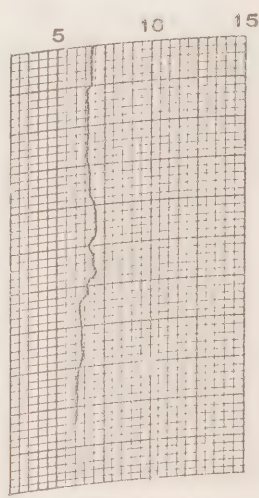
09-03-65-19.3
49°14'N
133°40'W



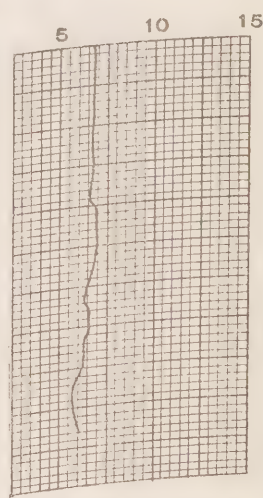
09-03-65-22.5
49°10'N
132°40'W



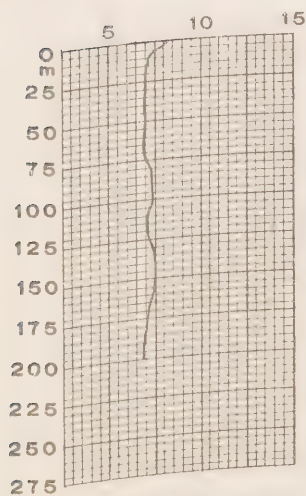
10-03-65-02.0
49°06'N
131°40'W



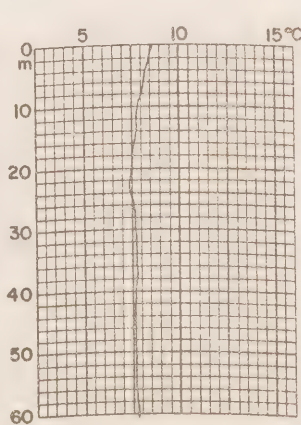
10-03-65-05.5
49°02'N
130°40'W



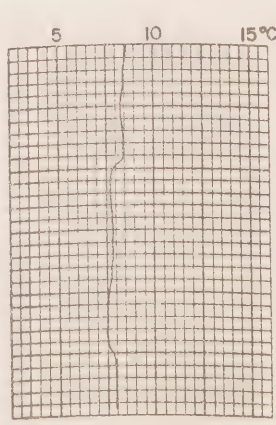
10-03-65-07.8
48°55'N
129°40'W



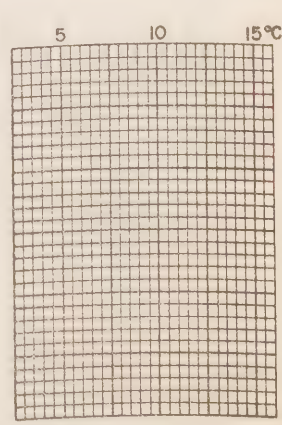
10-03-65-17.3
48°41'N
126°40'W



10-03-65-19.4
48°38'N
126°00'W



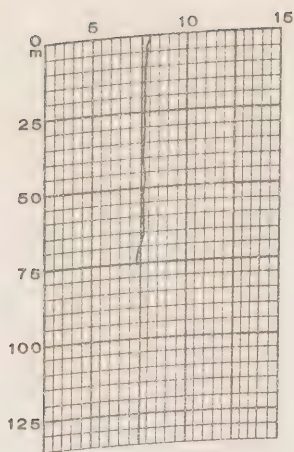
10-03-65-12.3
48°33'N
125°33'W



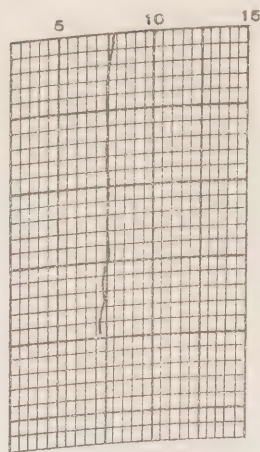
CCGS "STONETOWN" Patrol No. 64

**Daily bathythermograms
and
OCEAN series bathythermograms**

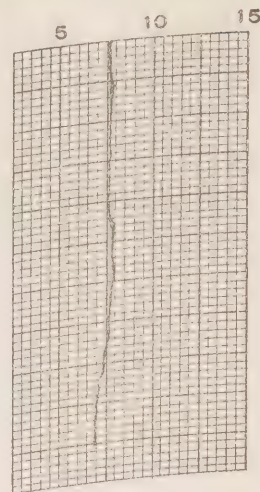
C.C.G S. "Stonetown", Patrol No. 64



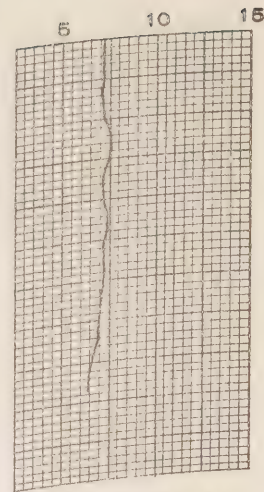
0015-06-03-65
48°33'n
125°33'w



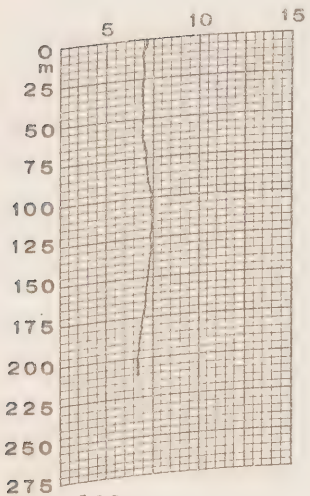
0200-06-03-65
48°37'n
126°01'w



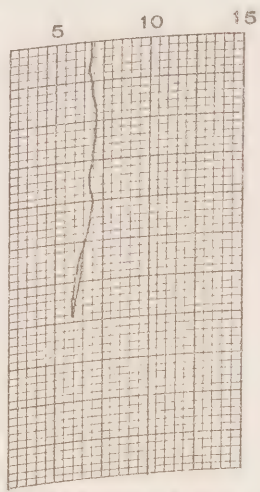
0415-06-03-65
48°41'n
126°40'w



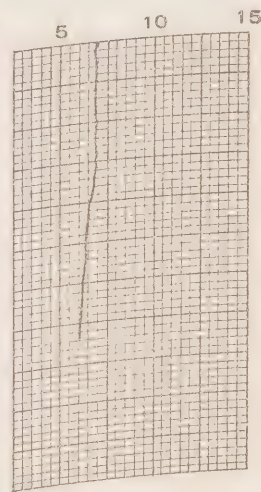
0745-06-03-65
48°52'n
127°40'w



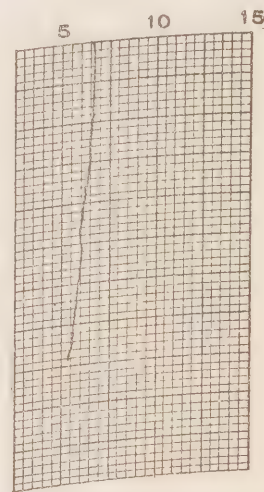
1035-06-03-65
48°51'n
128°40'w



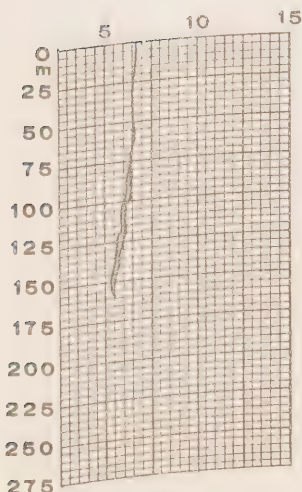
1355-06-03-65
48°52'n
129°40'w



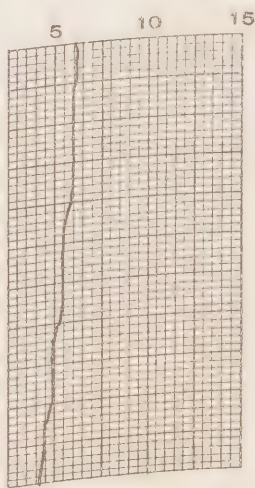
1710-06-03-65
49°00'n
130°40'w



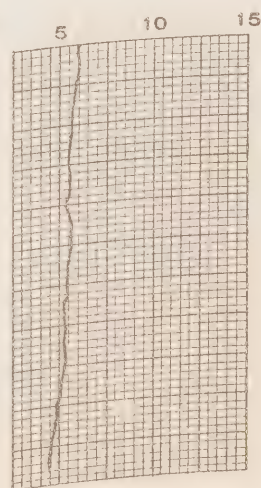
2025-06-03-65
49°02'n
131°40'w



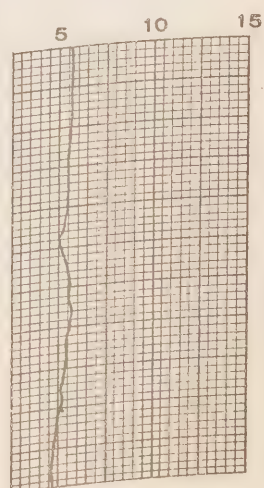
2330-06-03-65
49°03'n
132°40'w



1040-07-03-65
49°15'n
135°40'w

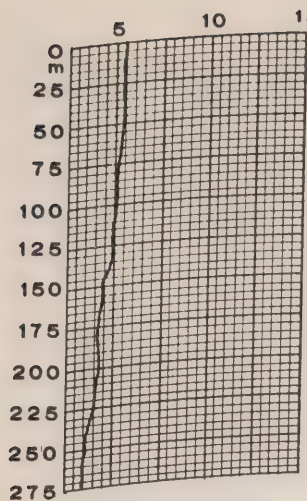


1545-07-03-65
49°28'n
137°40'w

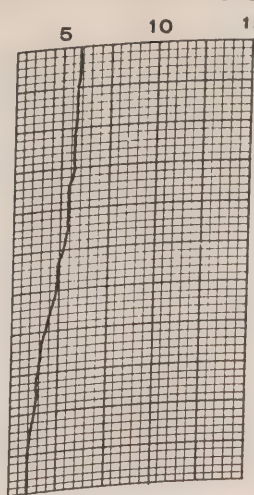


1810-07-03-65
49°36'n
138°35'w

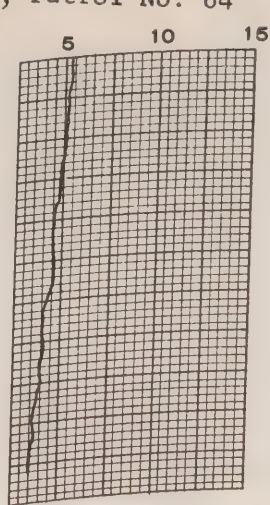
C.C.G.S. "Stonetown", Patrol No. 64



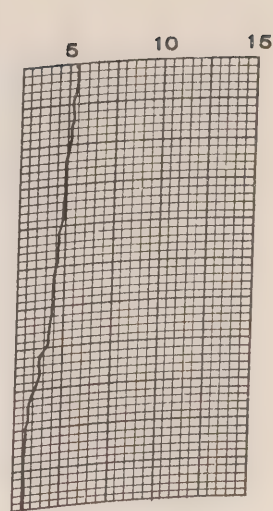
0320-08-03-65
49°47'N
140°40'W



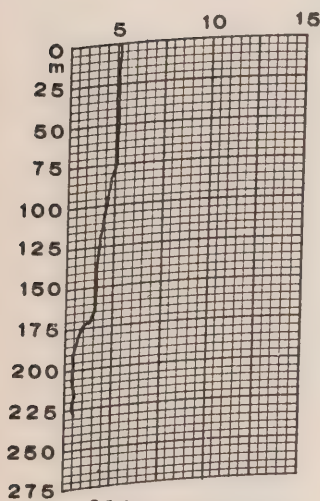
1045-08-03-65
49°48'N
141°40'W



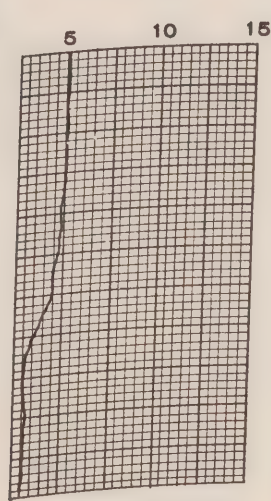
1800-08-03-65
49°51'N
142°40'W



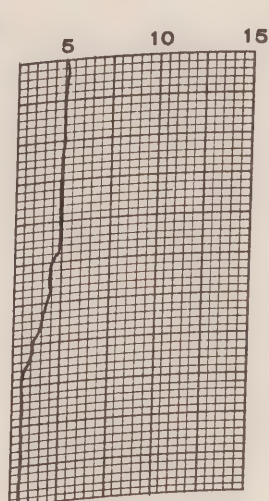
1800-09-03-65
49°30'N
145°01'W



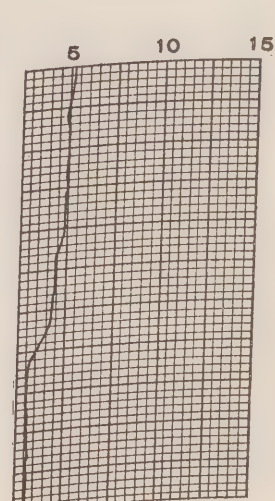
2100-09-03-65
49°31'N
144°57'W



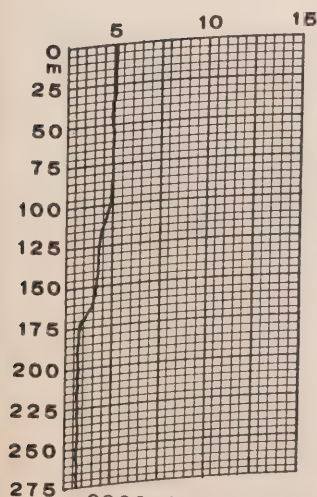
0000-10-03-65
50°00'N
144°55'W



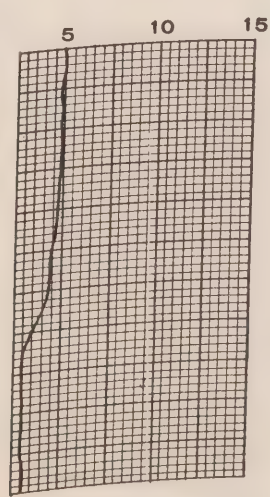
0300-10-03-65
50°03'N
144°55'W



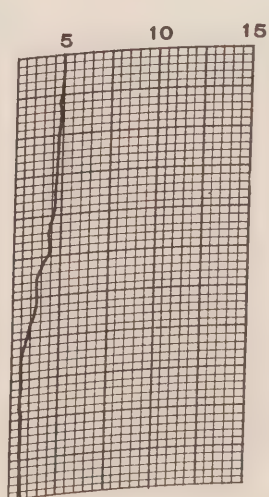
0600-10-03-65
50°04'N
144°56'W



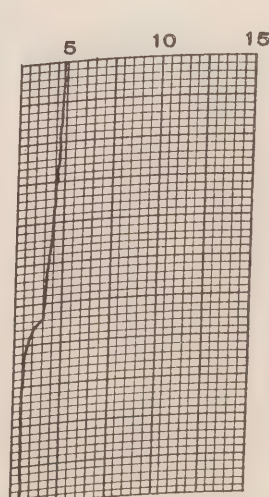
0900-10-03-65
50°07'N
144°57'W



1200-10-03-65
50°05'N
145°00'W

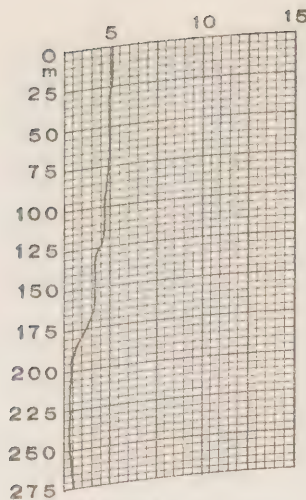


1500-10-03-65
50°06'N
144°54'W

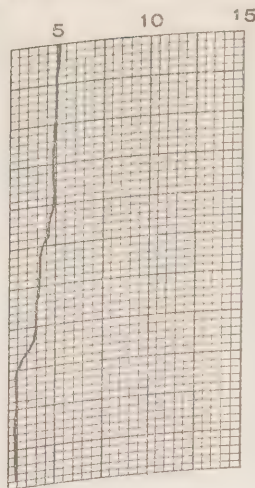


1800-10-03-65
50°05'N
144°58'W

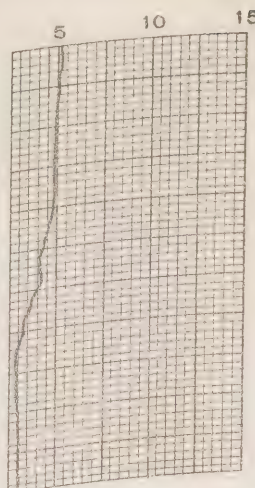
C.C.G.S. "Stonetown", Patrol No. 64



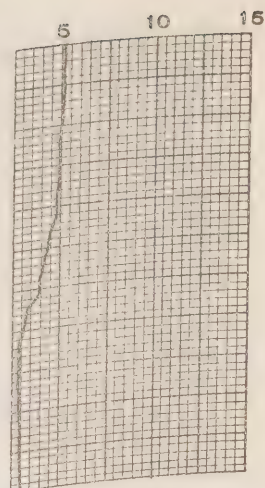
2100-10-03-65
50°00'n
145°00'w



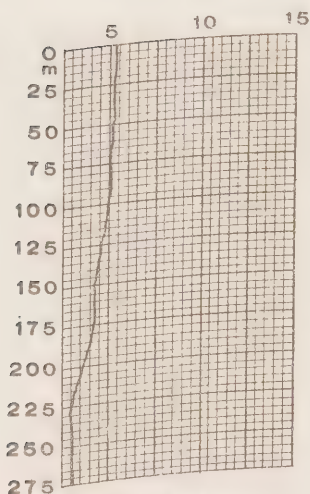
0000-11-03-65
49°50'n
144°59'w



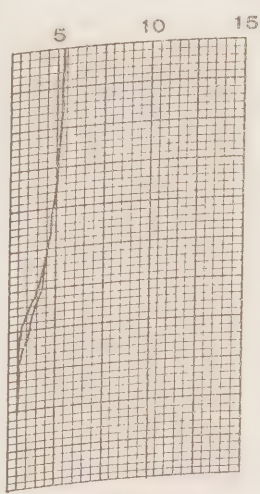
0300-11-03-65
50°00'n
144°58'w



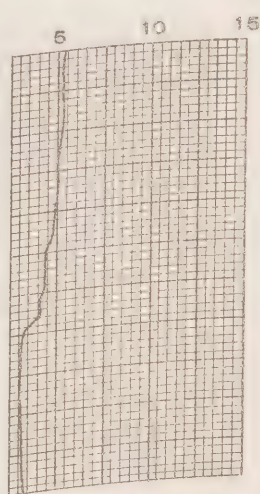
0600-11-03-65
49°58'n
144°57'w



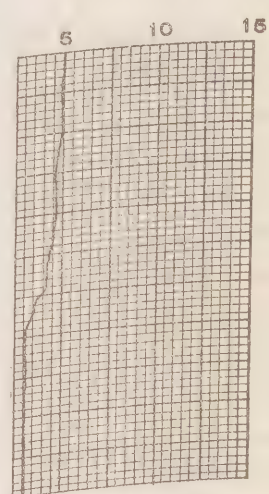
0900-11-03-65
50°00'n
145°00'w



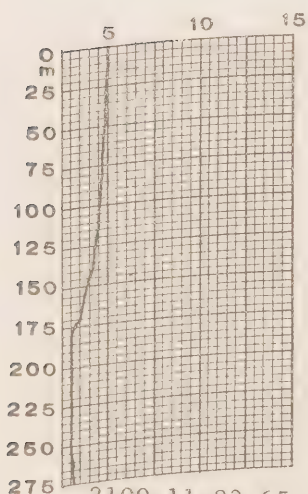
1200-11-03-65
49°50'n
144°50'w



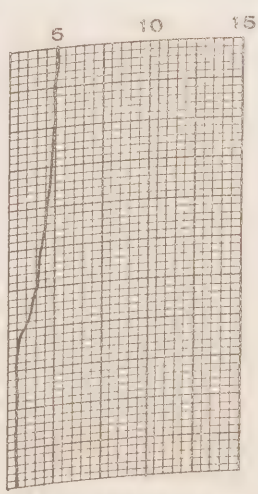
1500-11-03-65
49°57'n
144°55'w



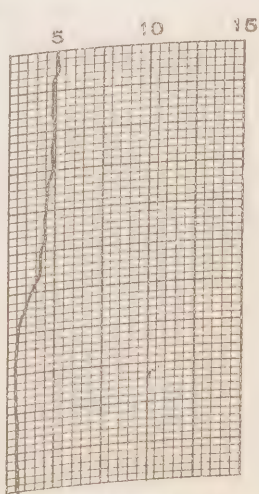
1800-11-03-65
50°08'n
144°56'w



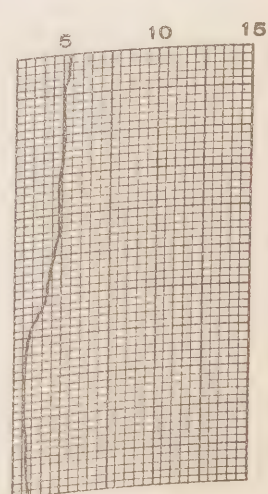
2100-11-03-65
50°13'n
144°56'w



0000-12-03-65
50°10'n
144°59'w

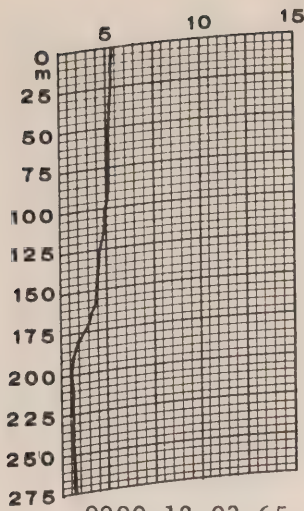


0300-12-03-65
49°59'n
145°00'w

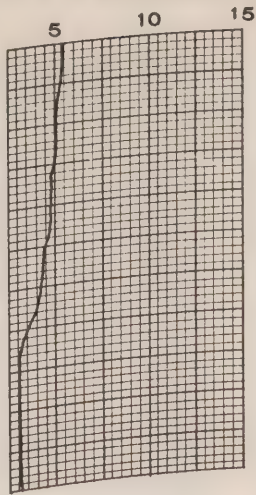


0600-12-03-65
50°02'n
145°01'w

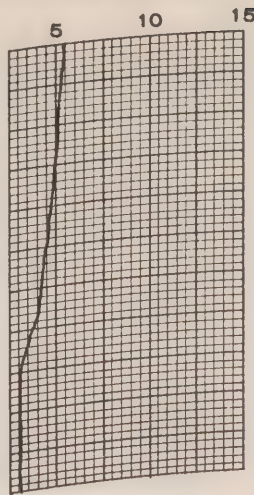
C.C.G.S. "Stonetown", Patrol No. 64



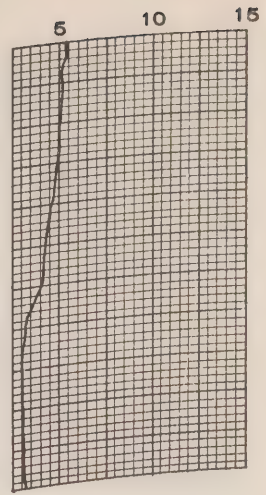
0900-12-03-65
50°03'n
145°01'w



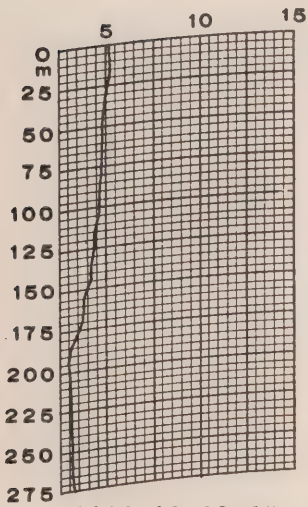
1200-12-03-65
50°00'n
145°00'w



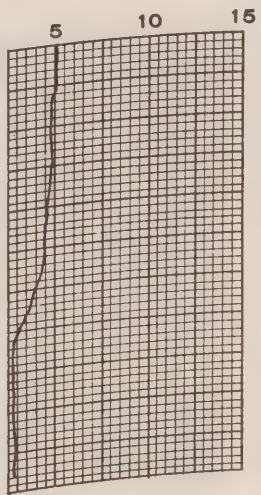
1500-12-03-65
49°55'n
144°57'w



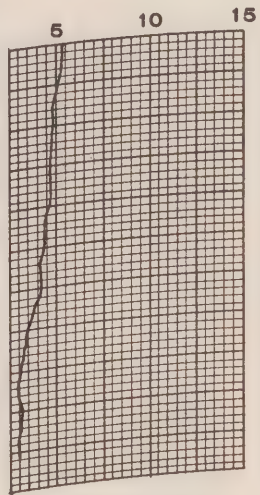
1800-12-03-65
50°00'n
145°00'w



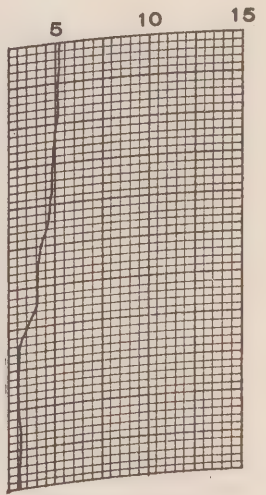
2100-12-03-65
50°00'n
145°00'w



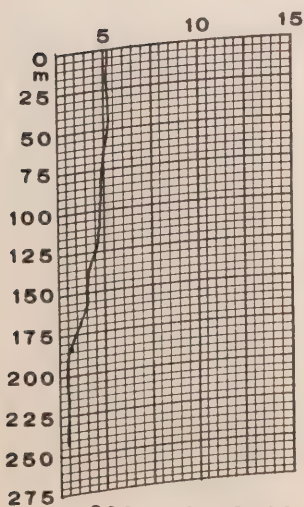
0000-13-03-65
50°03'n
144°55'w



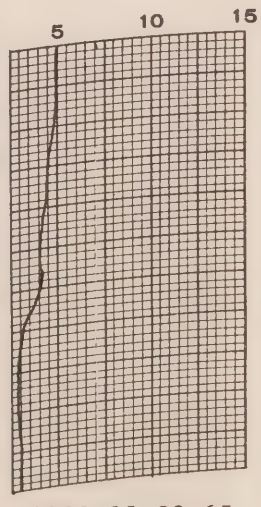
0300-13-03-65
49°57'n
145°10'w



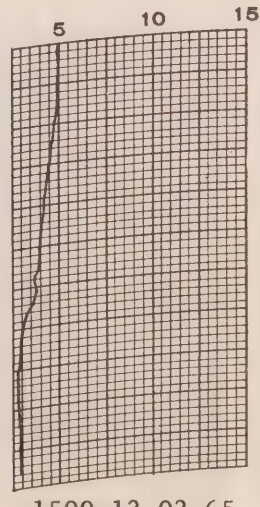
0600-13-03-65
50°00'n
145°00'w



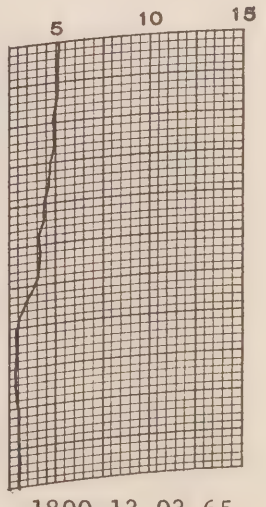
0900-13-03-65
50°05'n
144°50'w



1200-13-03-65
50°00'n
145°00'w

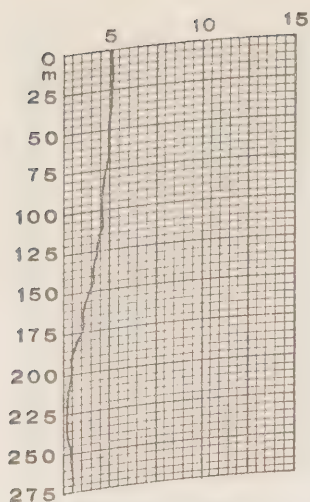


1500-13-03-65
50°01'n
145°09'w

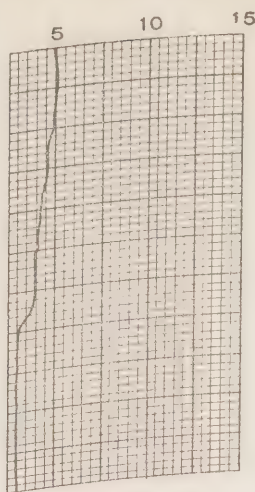


1800-13-03-65
50°00'n
145°00'w

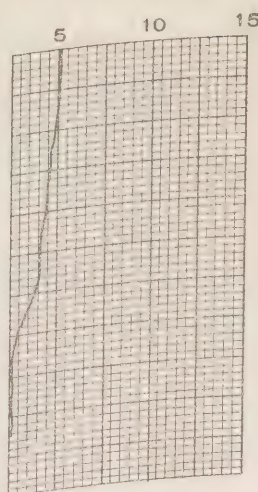
C.C G.S. "Stonetown", Patrol No. 64



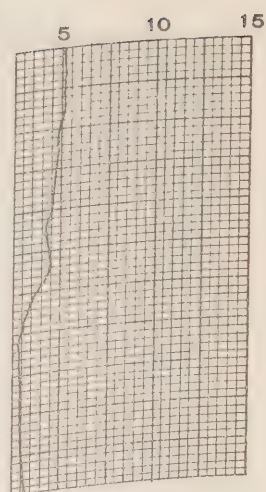
2100-13-03-65
50°04'n
144°55'w



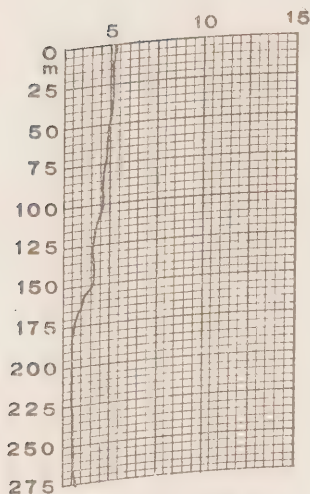
0000-14-03-65
50°08'n
144°38'w



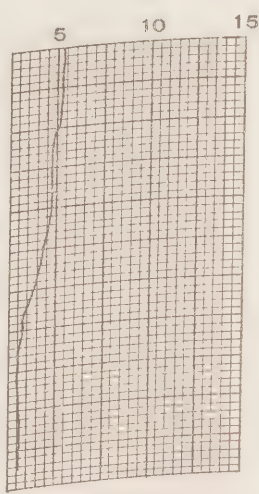
0300-14-03-65
50°02'n
145°00'w



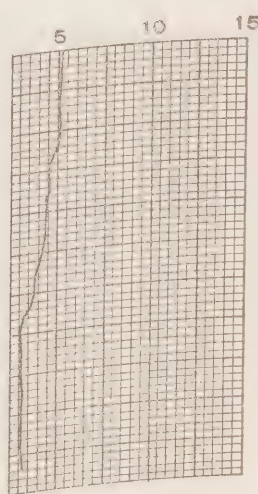
0600-14-03-65
50°03'n
145°03'w



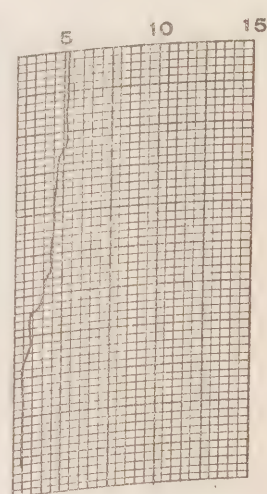
0900-14-03-65
50°02'n
145°00'w



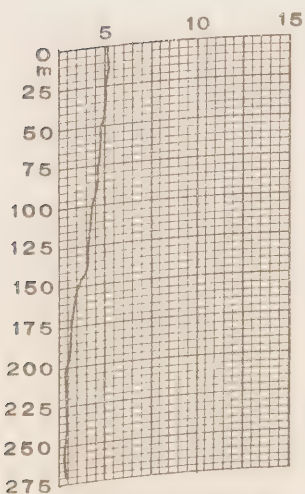
1200-14-03-65
50°00'n
144°56'w



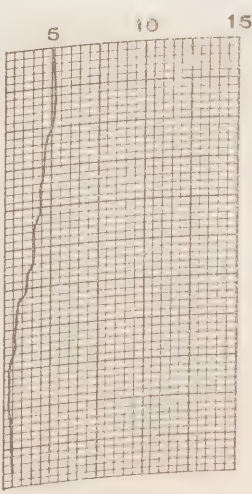
1500-14-03-65
50°01'n
145°02'w



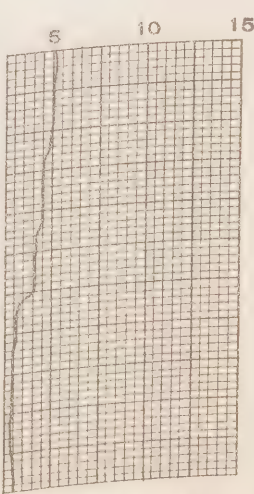
1800-14-03-65
50°00'n
145°00'w



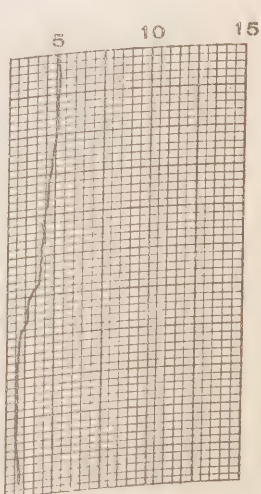
2100-14-03-65
50°00'n
145°00'w



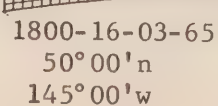
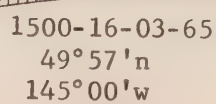
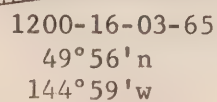
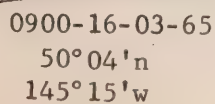
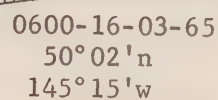
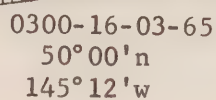
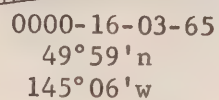
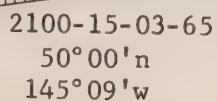
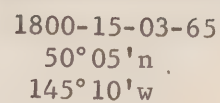
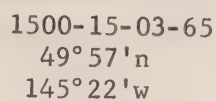
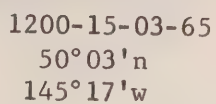
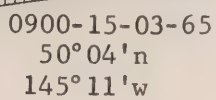
0000-15-03-65
50°01'n
145°00'w



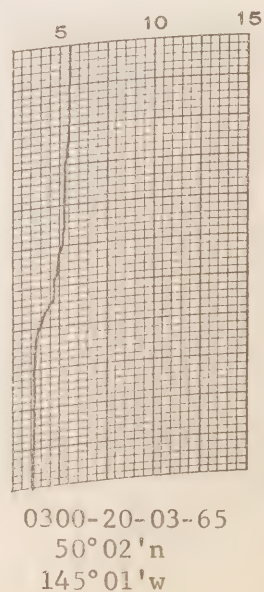
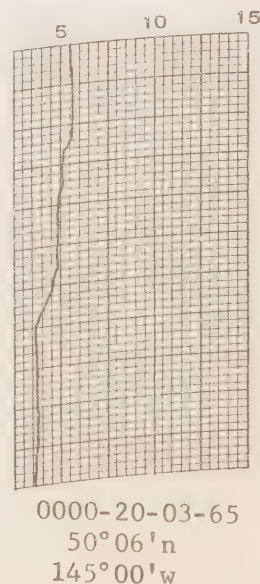
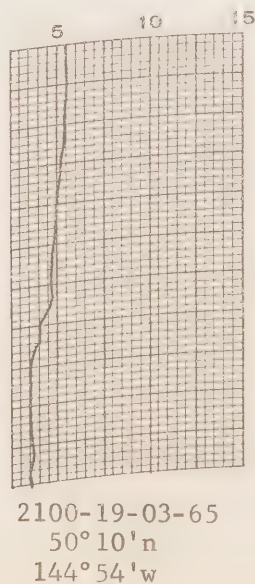
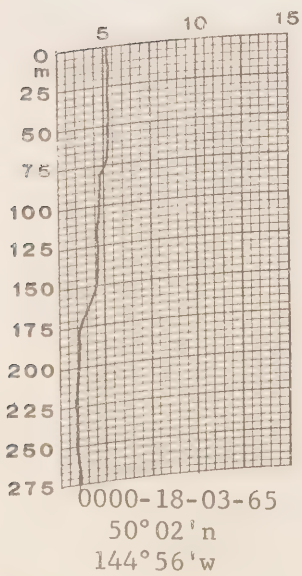
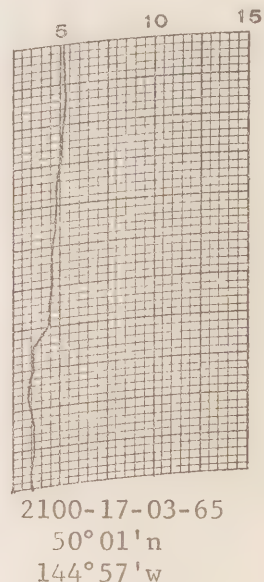
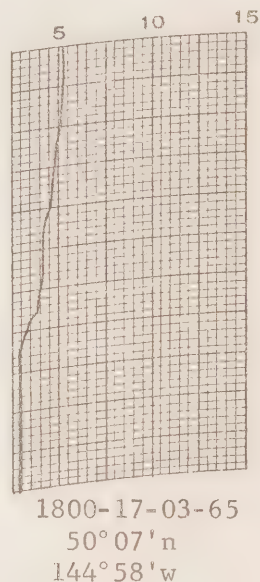
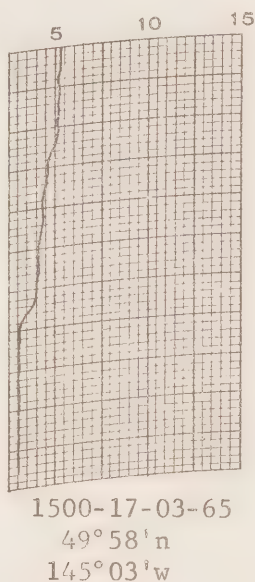
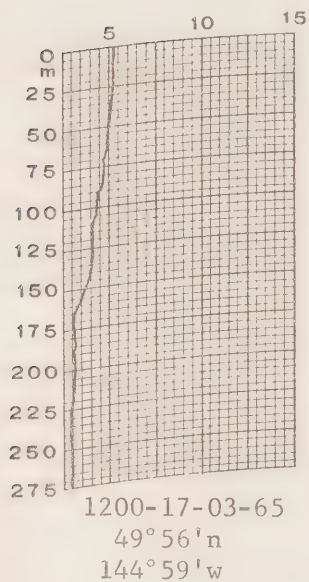
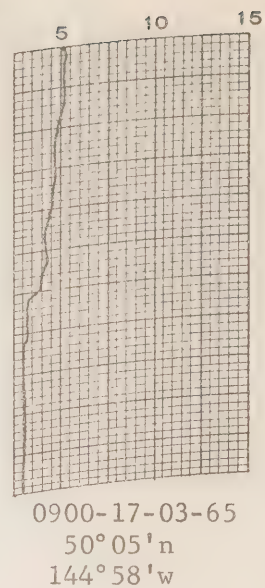
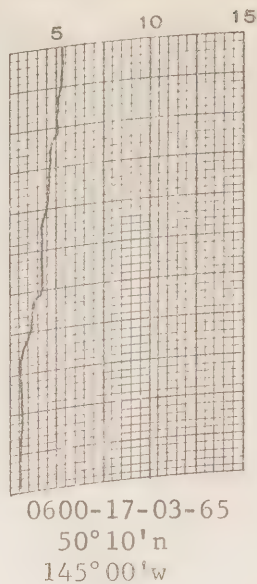
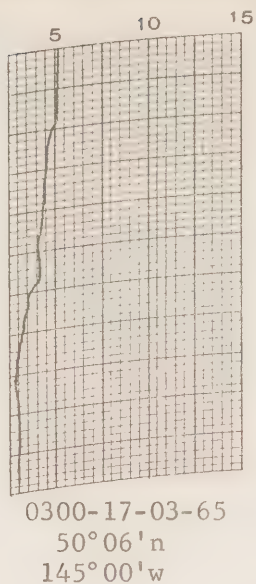
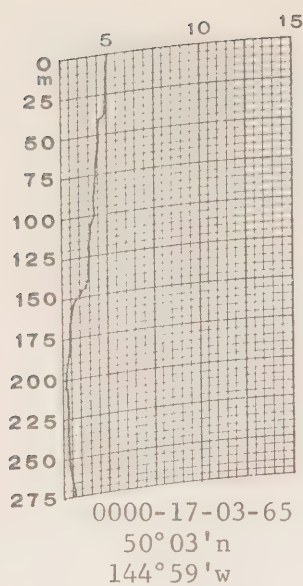
0300-15-03-65
50°01'n
145°04'w



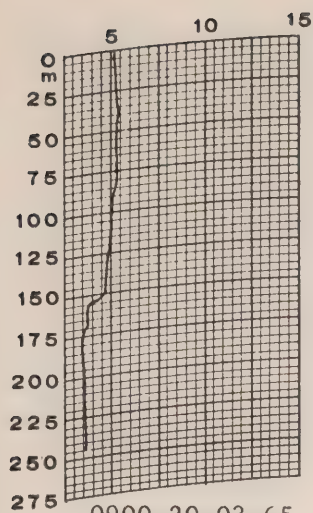
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50°03'n
145°04'w



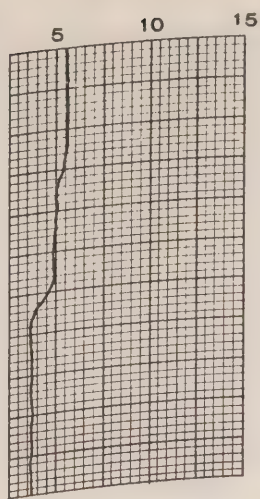
C.C.G.S. "Stonetown", Patrol No. 64



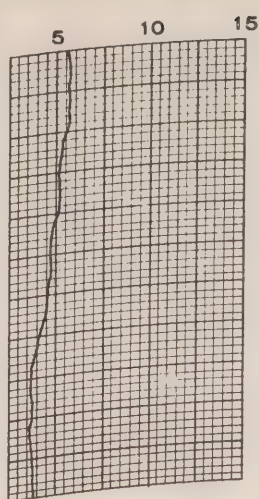
C.C.G.S. "Stonetown", Patrol No. 64



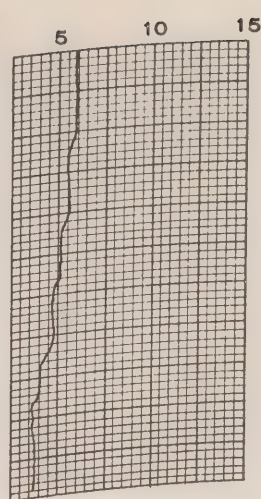
0900-20-03-65
50°04'n
145°06'w



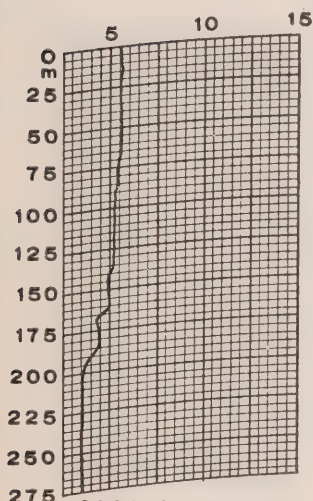
1200-20-03-65
49°58'n
145°00'w



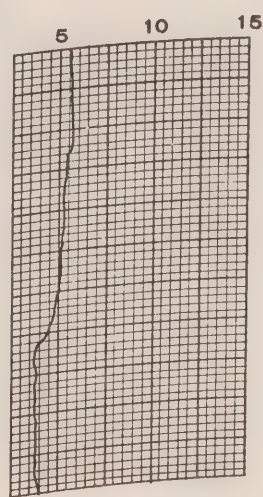
1500-20-03-65
49°52'n
144°55'w



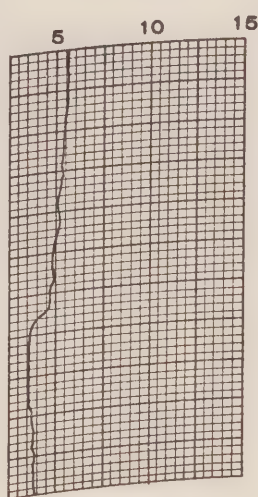
1800-20-03-65
49°47'n
144°57'w



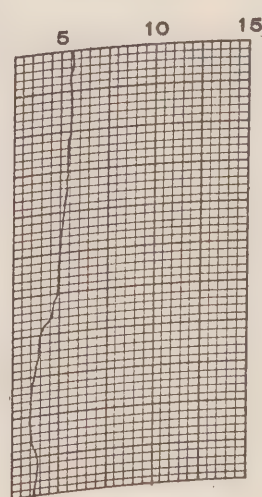
2100-20-03-65
49°58'n
144°55'w



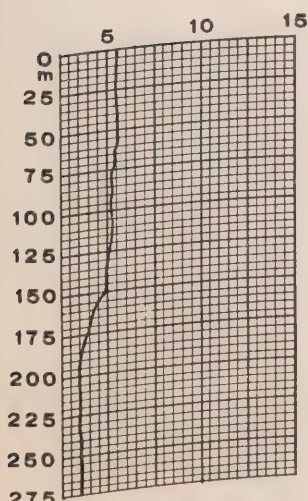
0000-21-03-65
50°03'n
144°54'w



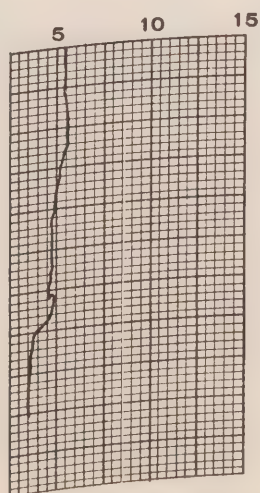
0300-21-03-65
50°04'n
144°53'w



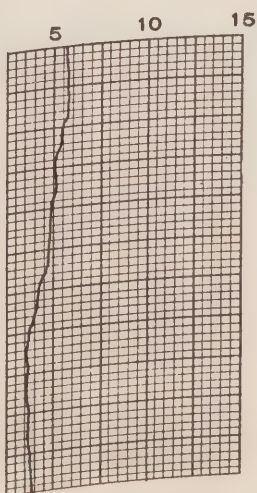
0600-21-03-65
50°07'n
144°52'w



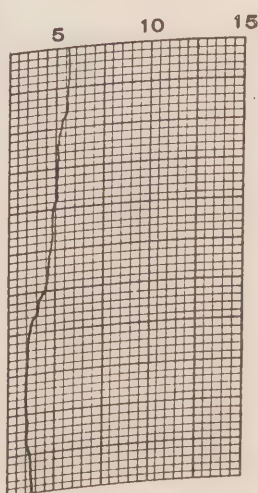
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50°12'n
144°53'w



1200-21-03-65
50°07'n
145°00'w

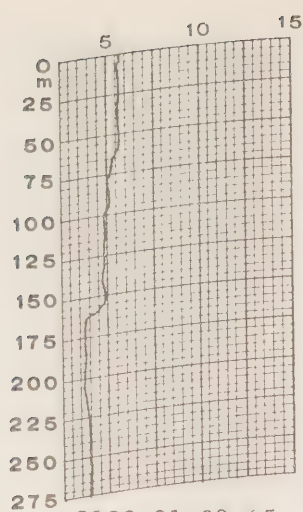


1500-21-03-65
50°05'n
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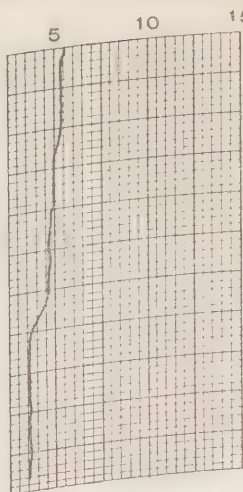


1800-21-03-65
50°05'n
145°05'w

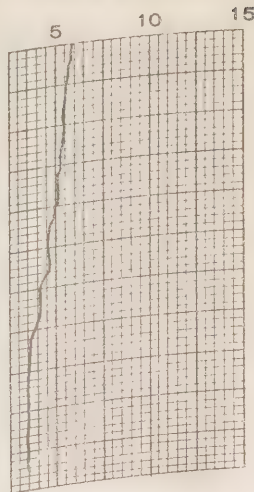
C.C.G.S. "Stonetown", Patrol No.64



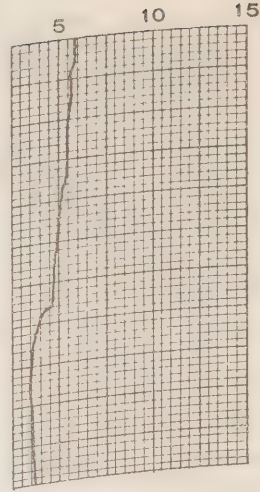
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50°13'N
144°55'W



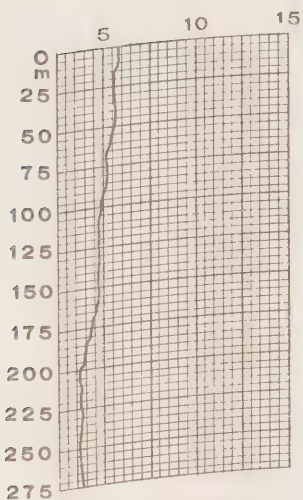
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50°10'N
144°58'W



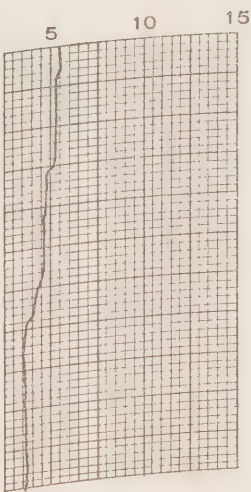
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49°58'N
145°00'W



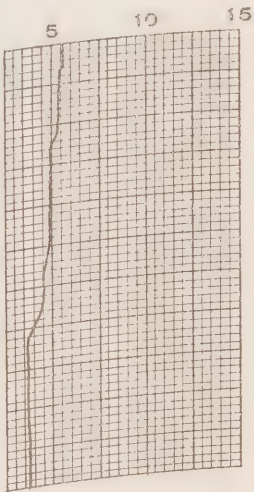
0600-22-03-65
50°00'N
145°00'W



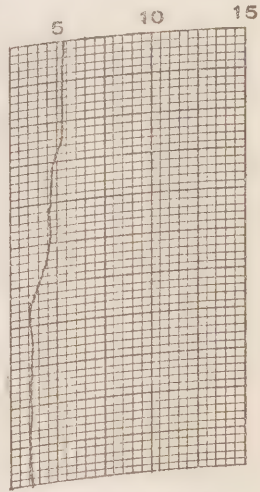
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50°00'N
145°03'W



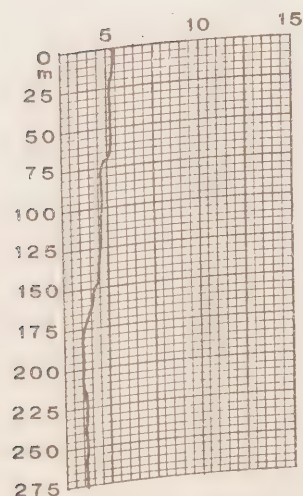
1200-22-03-65
50°05'N
145°00'W



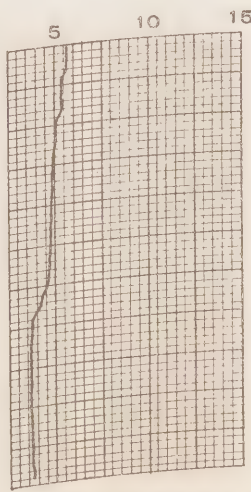
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50°04'N
145°01'W



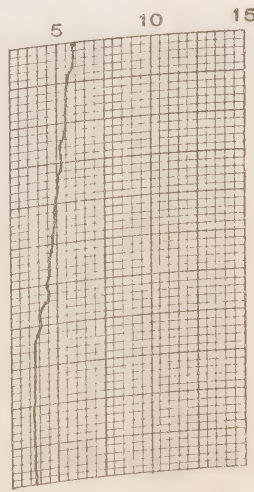
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50°10'N
145°00'W



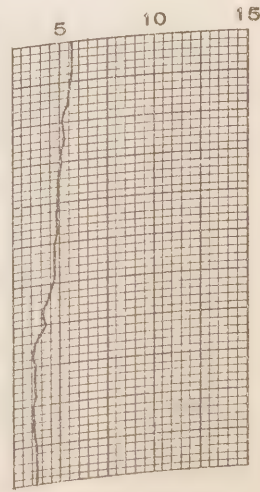
2100-22-03-65
50°12'N
145°00'W



0000-23-03-65
50°03'N
145°03'W

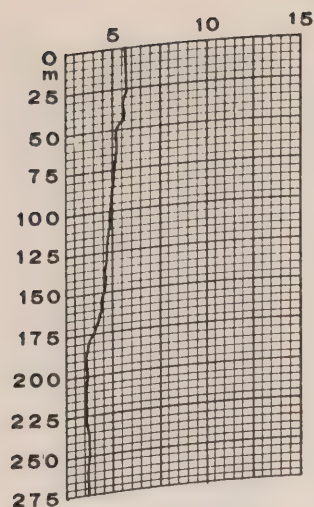


0300-23-03-65
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145°00'W

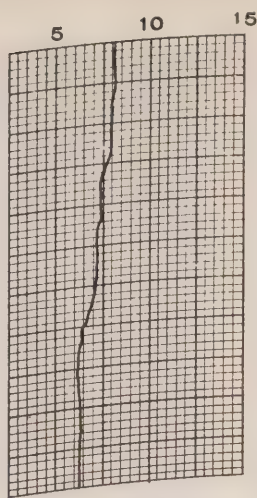


0600-23-03-65
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145°00'W

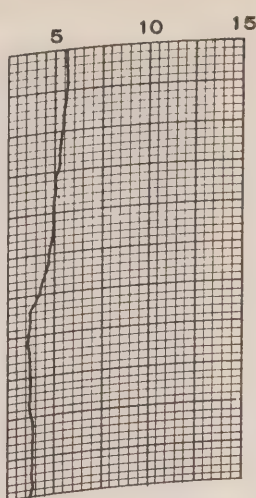
C.C.G.S. "Stonetown", Patrol No. 64



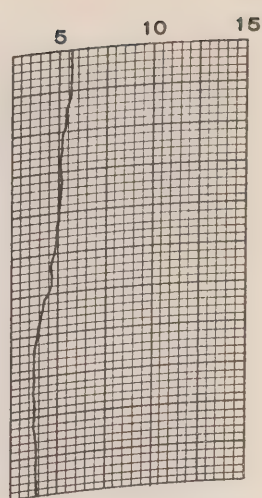
0900-23-03-65
50°02'N
145°00'W



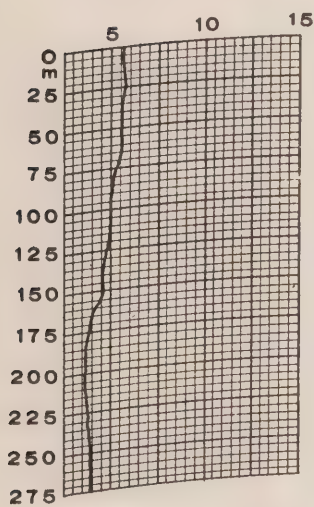
1200-23-03-65
50°03'N
145°03'W



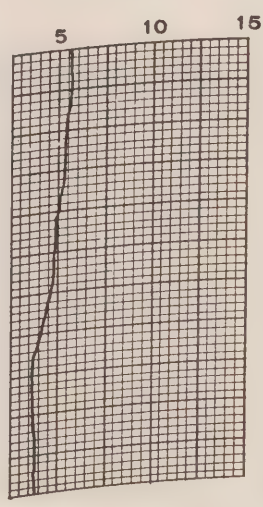
1500-23-03-65
50°06'N
145°07'W



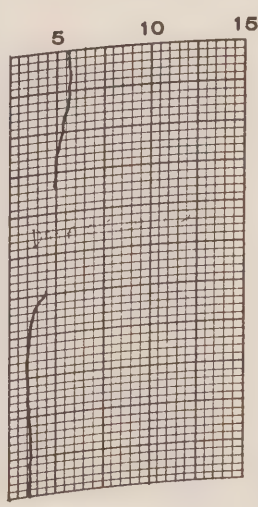
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145°07'W



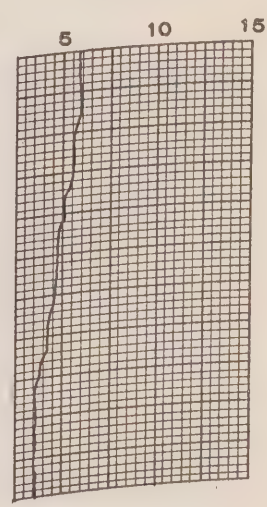
2100-23-03-65
50°17'N
145°05'W



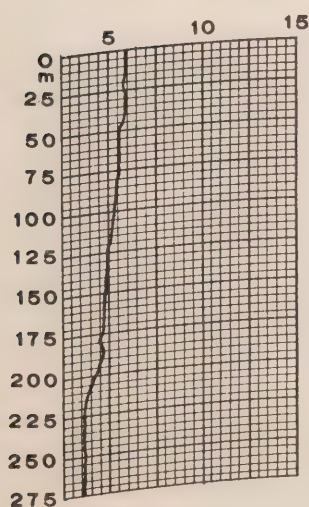
0000-24-03-65
50°09'N
145°05'W



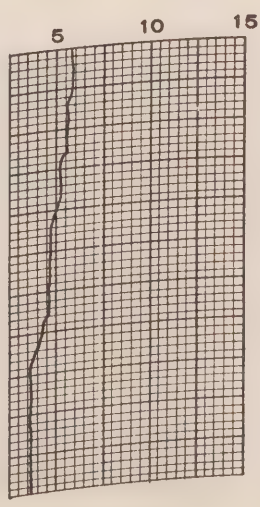
0300-24-03-65
50°02'N
145°00'W



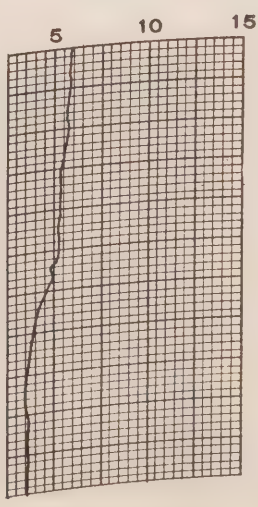
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49°58'N
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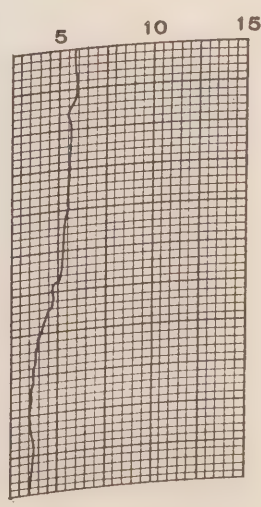
0900-24-03-65
50°02'N
145°00'W



1200-24-03-65
50°04'N
145°03'W

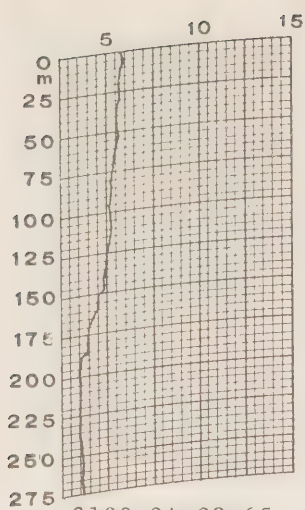


1500-24-03-65
50°06'N
144°57'W

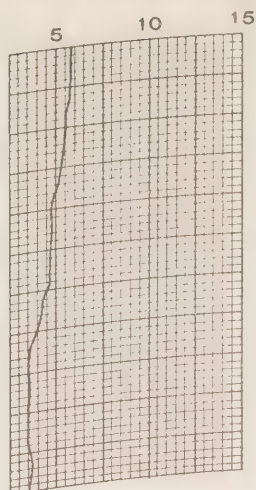


1800-24-03-65
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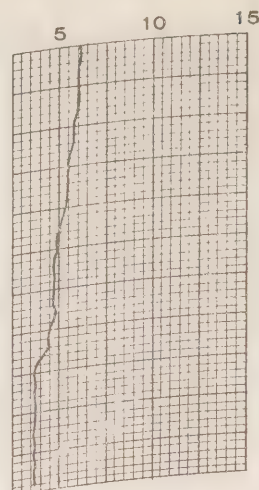
C.C.G.S. "Stonetown", Patrol No. 64



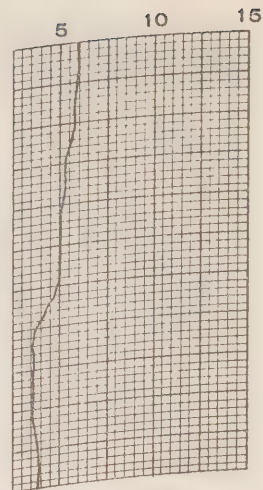
2100-24-03-65
50°13'n
144°45'w



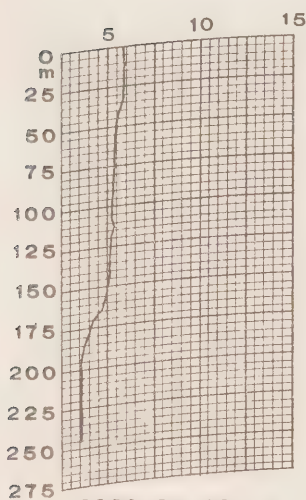
0000-25-03-65
50°01'n
144°57'w



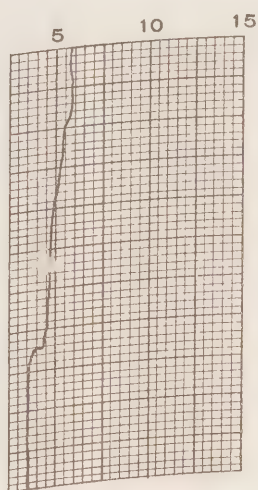
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49°56'n
145°03'w



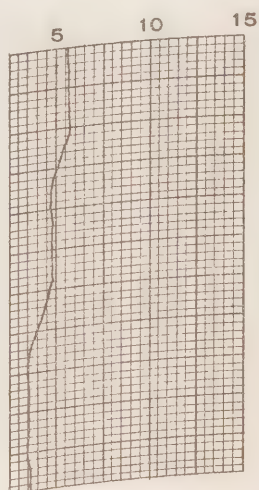
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49°58'n
145°05'w



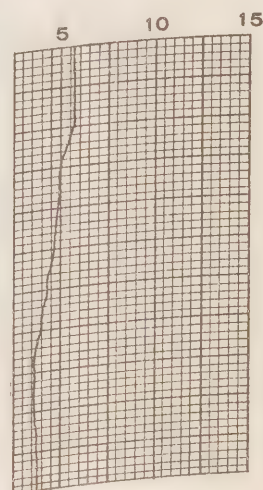
0900-25-03-65
50°00'n
145°07'w



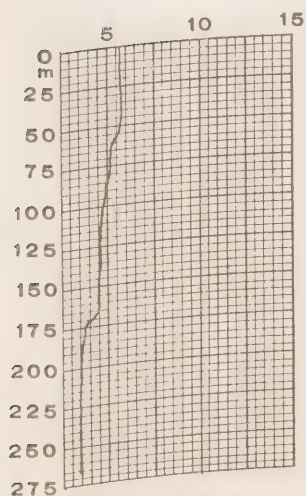
1200-25-03-65
50°01'n
144°58'w



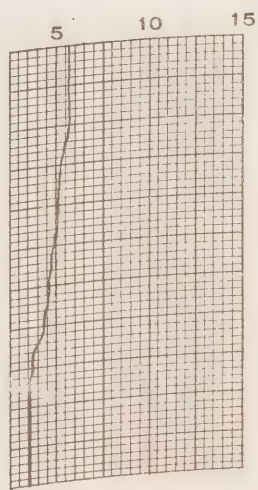
1500-25-03-65
50°04'n
145°09'w



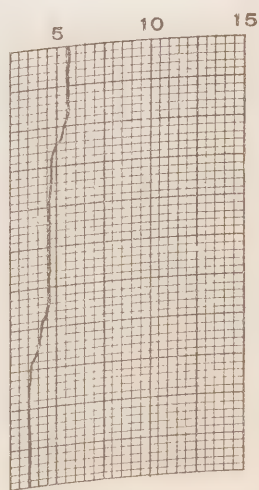
1800-25-03-65
50°04'n
145°14'w



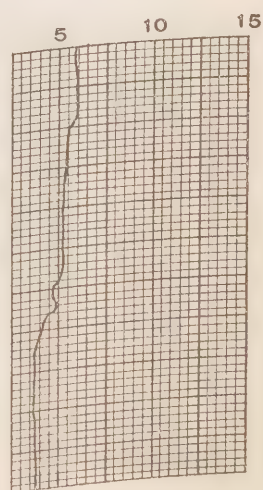
2100-25-03-65
50°00'n
145°00'w



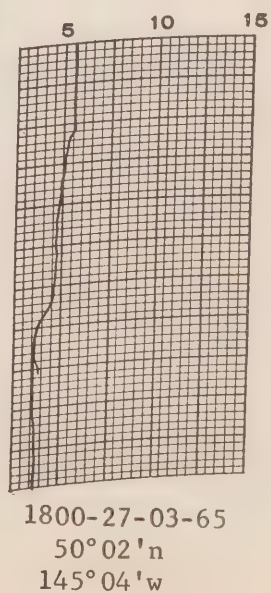
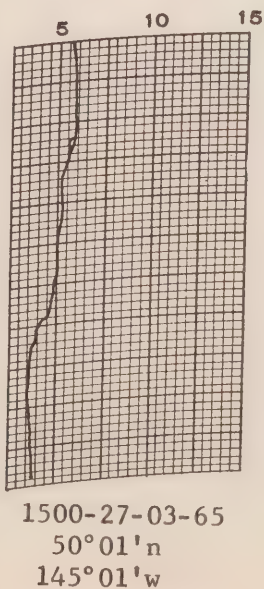
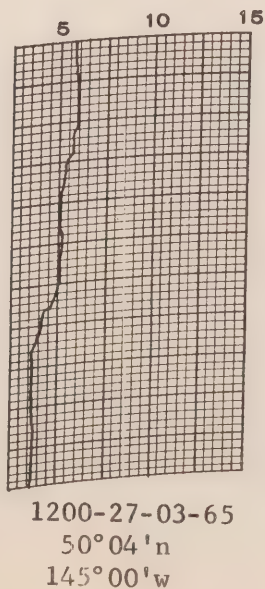
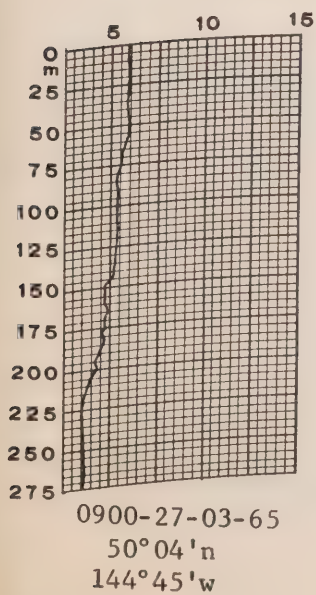
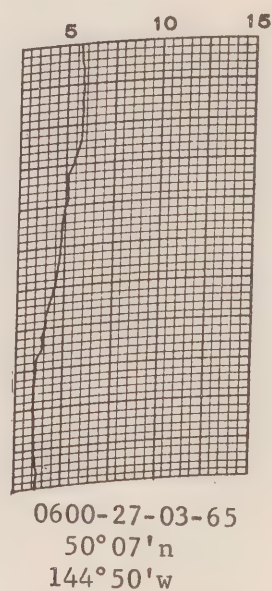
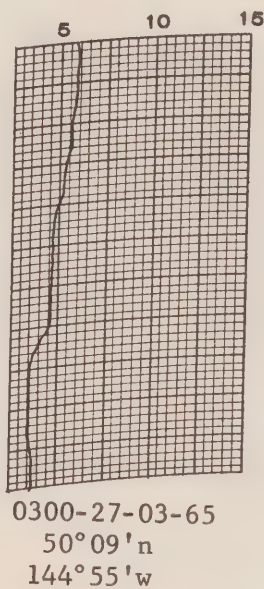
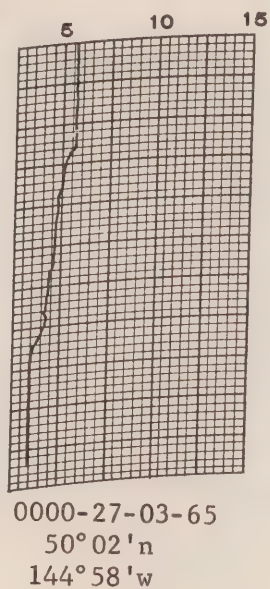
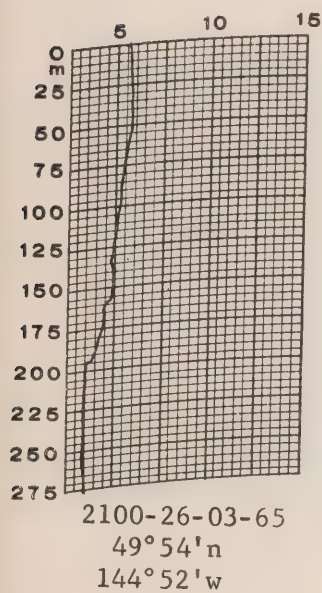
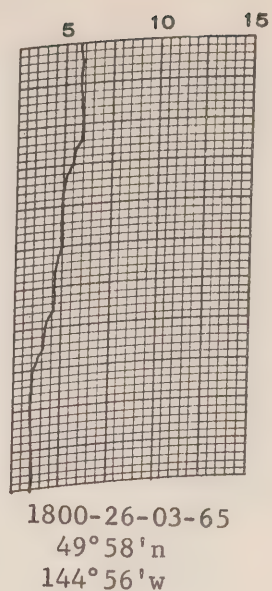
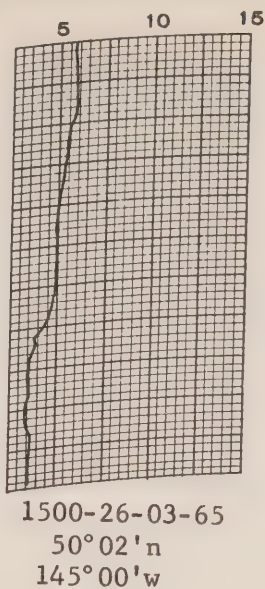
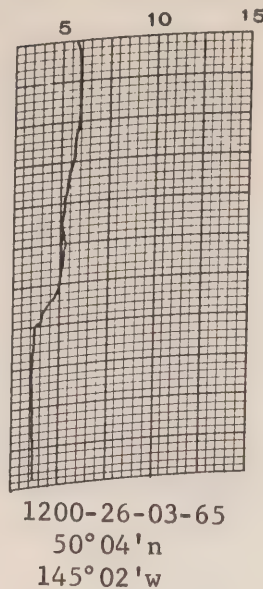
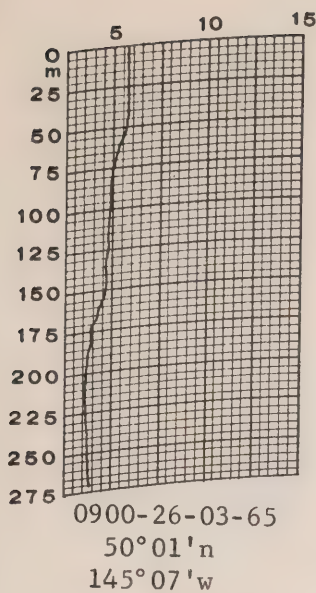
0000-26-03-65
50°01'n
144°52'w



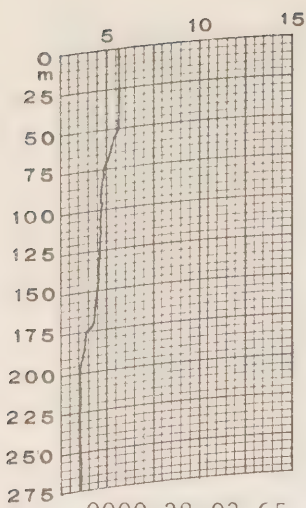
0300-26-03-65
50°02'n
145°08'w



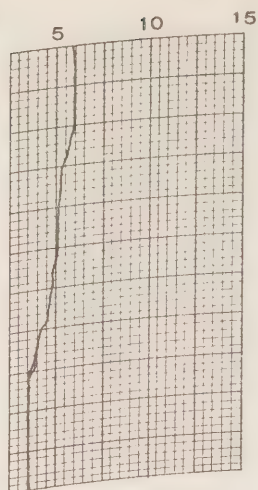
0600-26-03-65
50°06'n
145°24'w



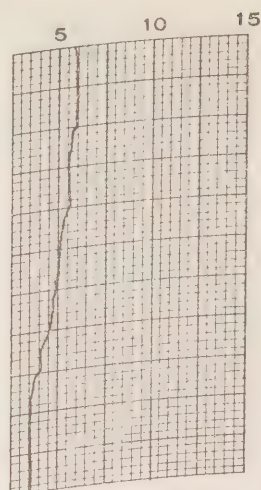
C.C.G.S. "Stonetown", Patrol No. 64



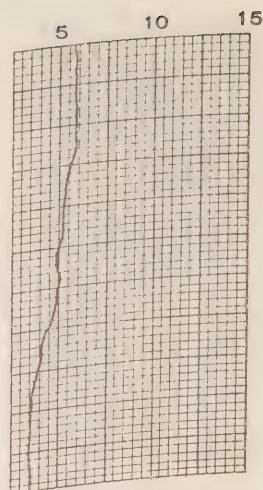
0000-28-03-65
50°00'n
145°04'w



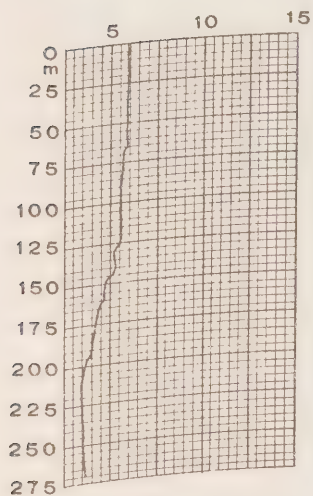
0300-28-03-65
50°00'n
144°58'w



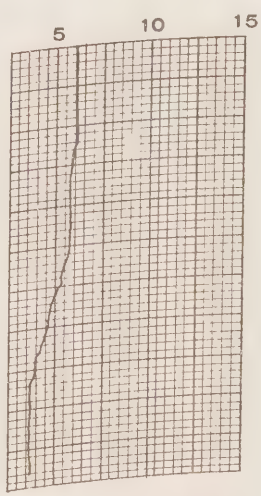
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144°51'w



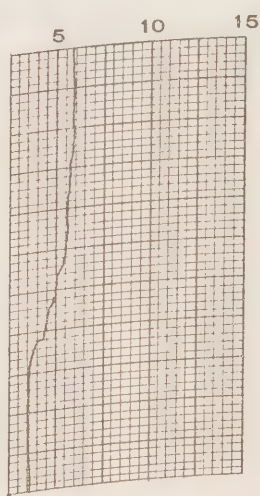
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144°50'w



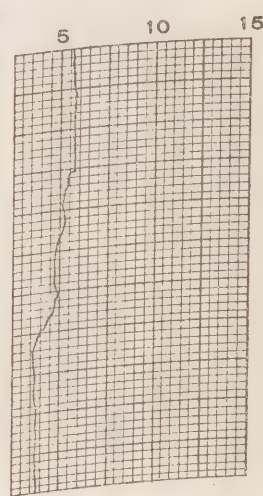
1200-28-03-65
50°02'n
144°56'w



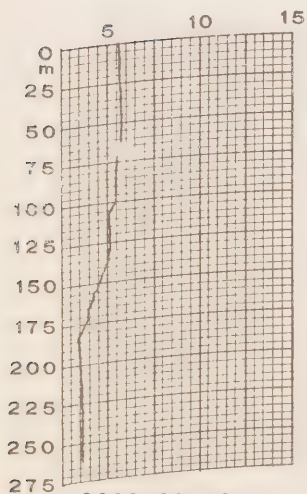
1500-28-03-65
50°02'n
144°51'w



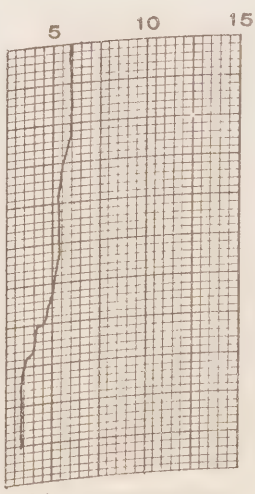
1800-28-03-65
49°58'n
144°57'w



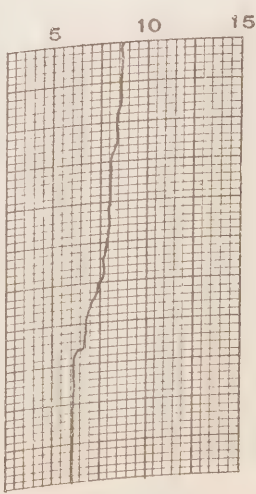
2100-28-03-65
50°00'n
145°03'w



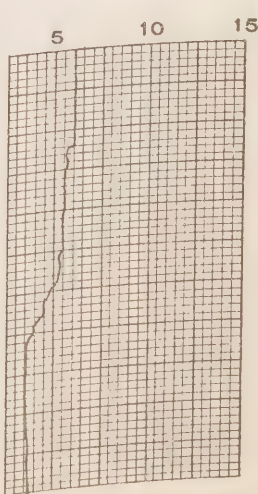
0000-29-03-65
50°01'n
145°15'w



0300-29-03-65
49°56'n
145°00'w

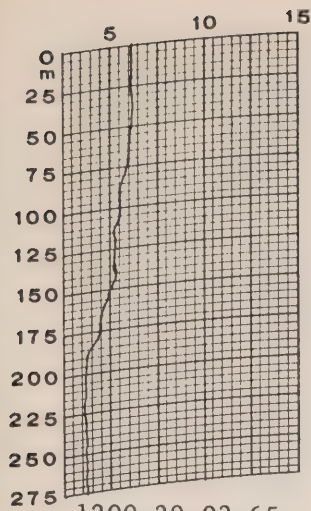


0600-29-03-65
49°55'n
144°55'w

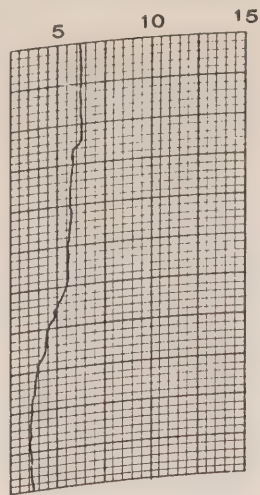


0900-29-03-65
49°59'n
144°56'w

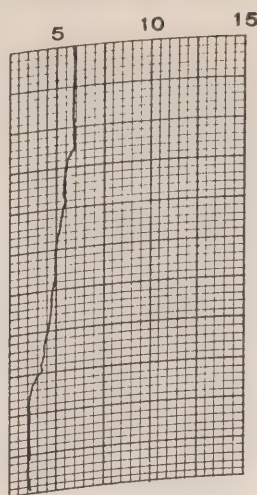
C.C.G S. "Stonetown", Patrol No. 64



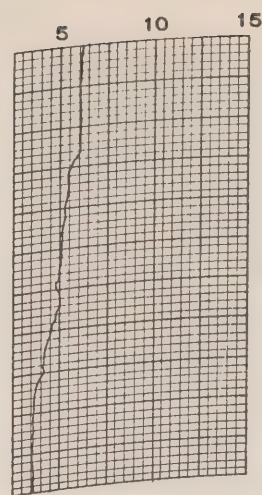
1200-29-03-65
49°56'n
144°56'w



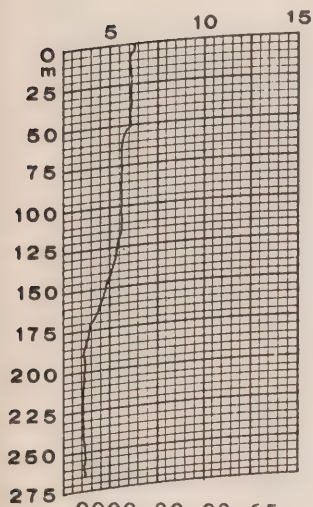
1500-29-03-65
49°58'n
144°49'w



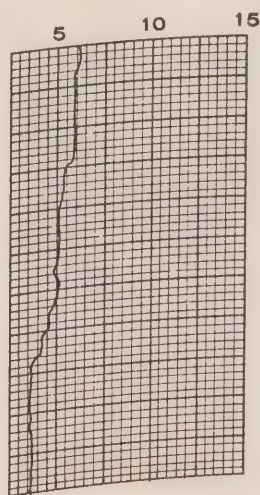
1800-29-03-65
49°57'n
144°53'w



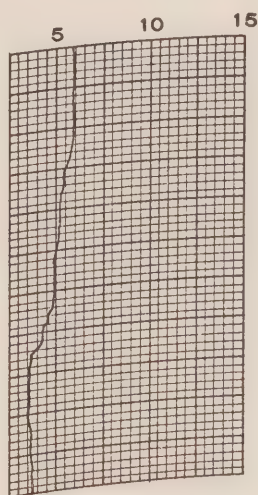
2100-29-03-65
49°53'n
144°55'w



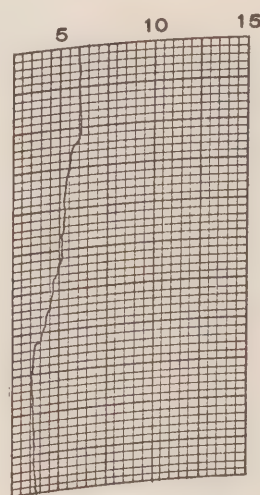
0000-30-03-65
49°57'n
144°55'w



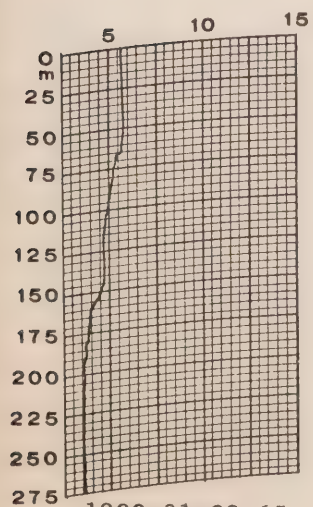
0300-30-03-65
50°01'n
144°59'w



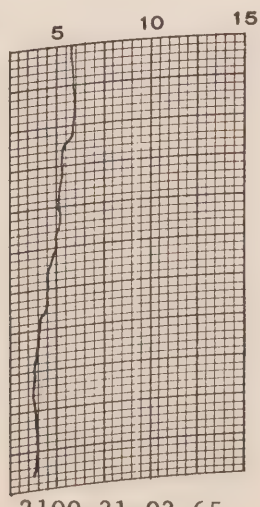
0600-30-03-65
50°04'n
144°54'w



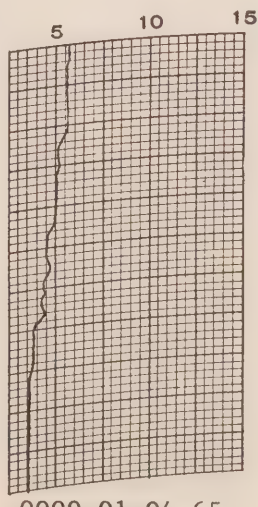
0900-30-03-65
50°07'n
144°52'w



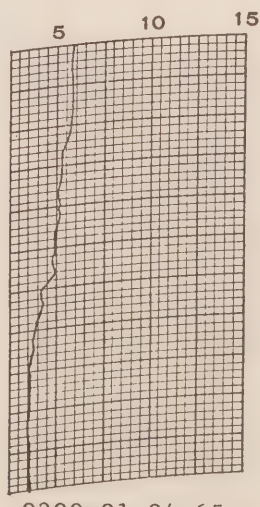
1800-31-03-65
49°59'n
145°16'w



2100-31-03-65
50°00'n
145°01'w

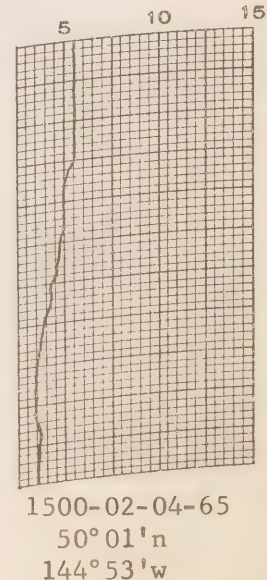
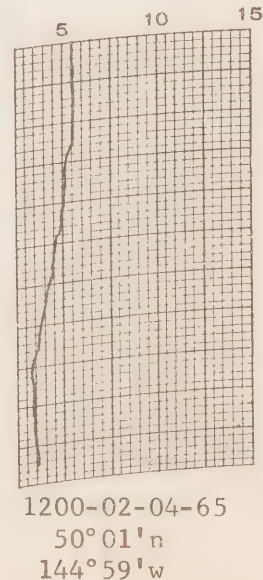
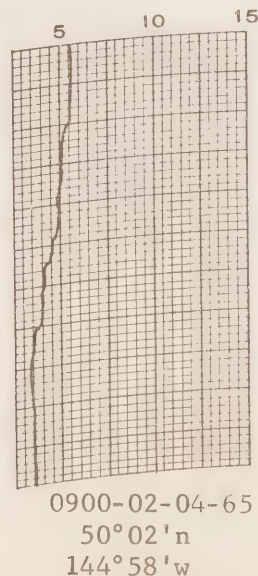
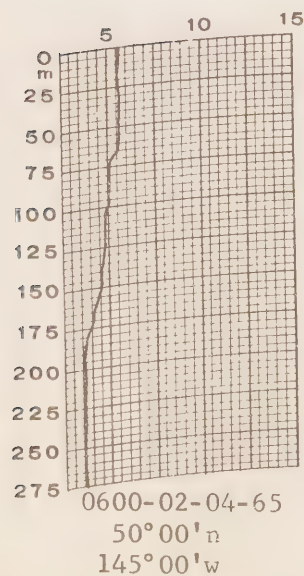
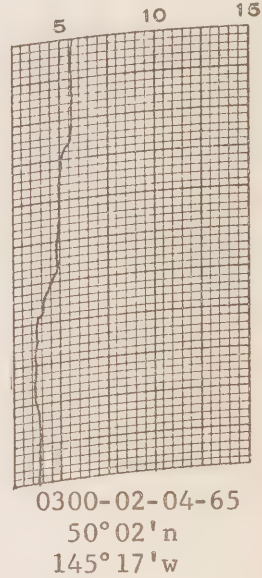
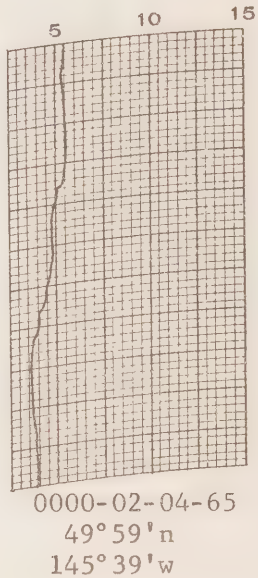
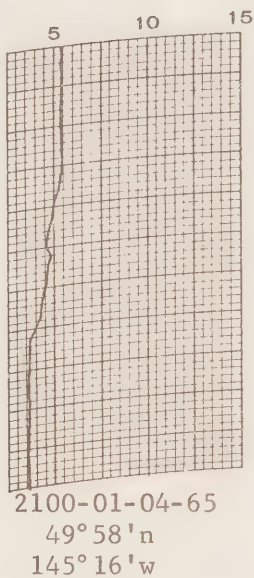
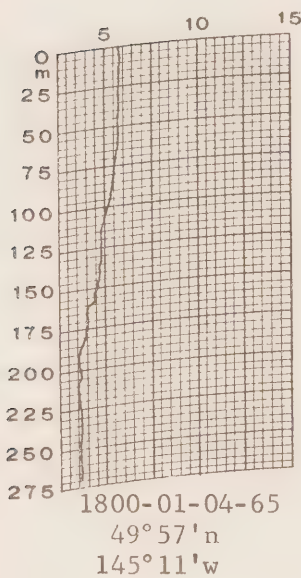
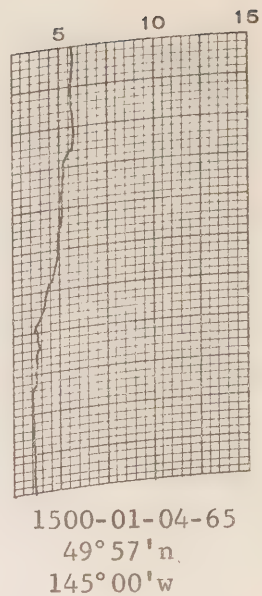
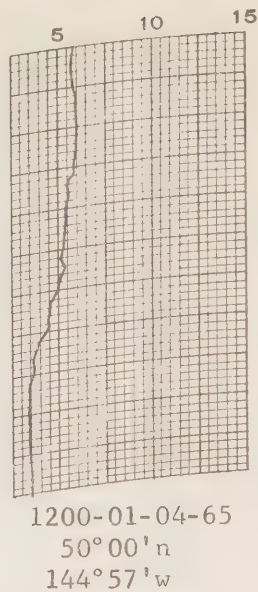
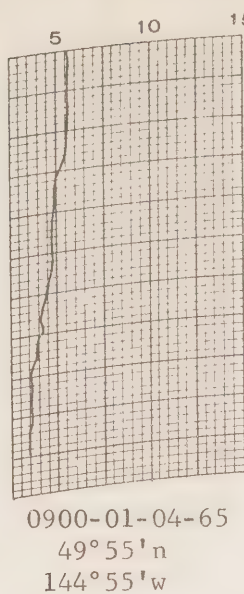
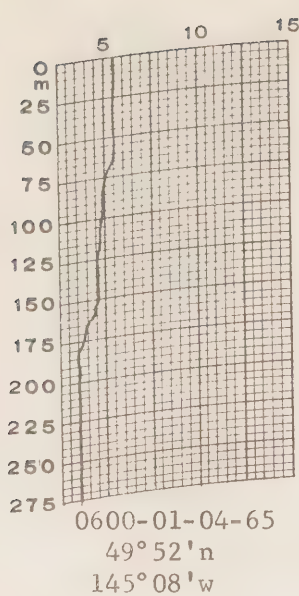


0000-01-04-65
50°00'n
144°56'w

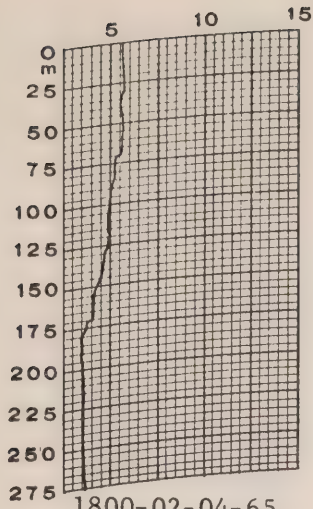


0300-01-04-65
49°55'n
145°02'w

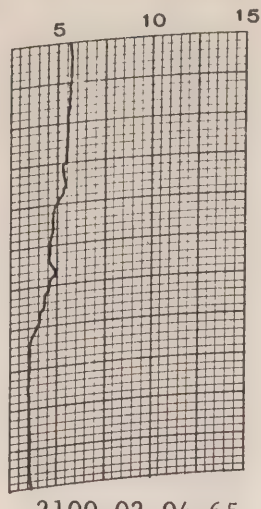
C.C.G.S. "Stonetown", Patrol No. 64



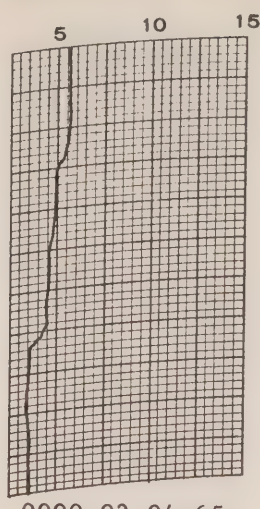
C.C.G.S. "Stonetown", Patrol No. 64



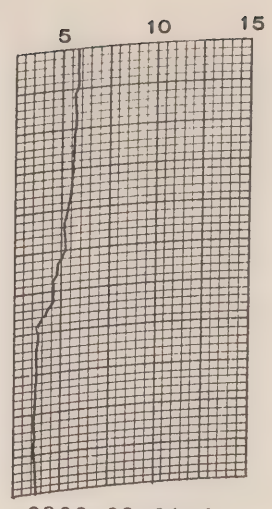
1800-02-04-65
50°01'N
144°57'W



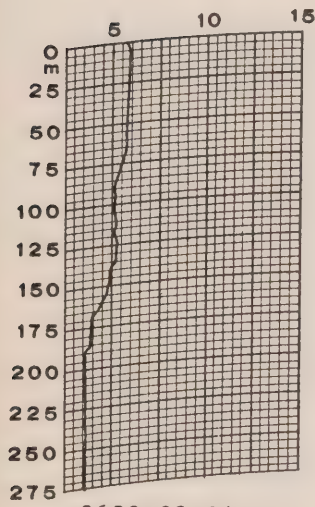
2100-02-04-65
50°01'N
145°04'W



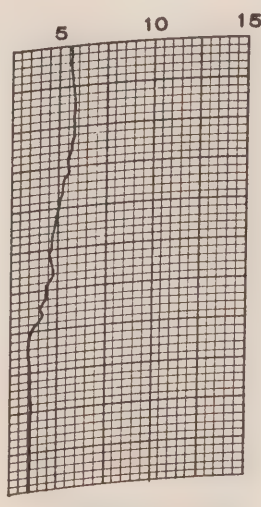
0000-03-04-65
49°56'N
145°06'W



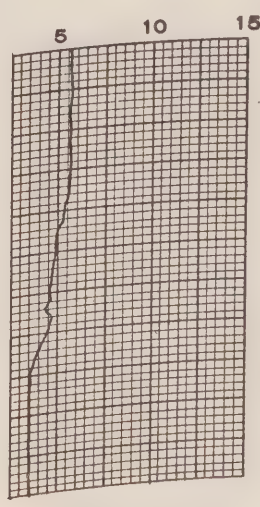
0300-03-04-65
49°57'N
145°03'W



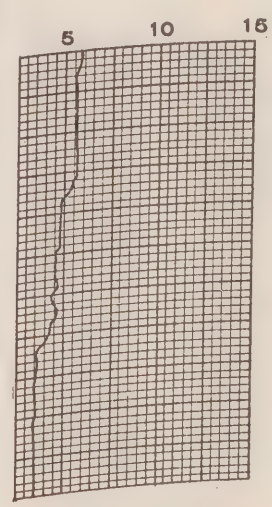
0600-03-04-65
49°56'N
144°53'W



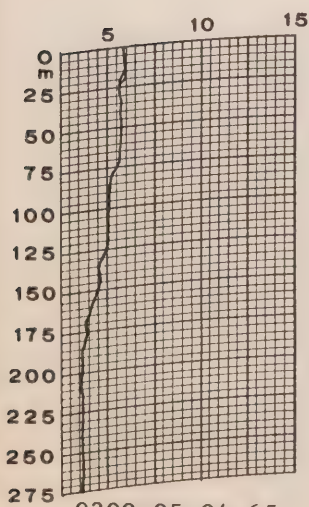
1800-04-04-65
50°00'N
144°58'W



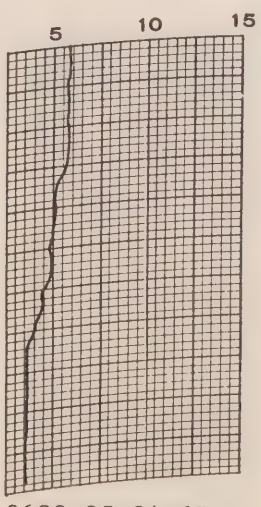
2100-04-04-65
50°00'N
145°04'W



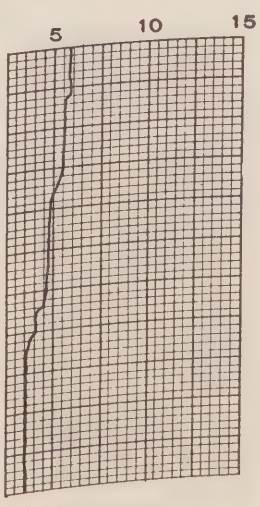
0000-05-04-65
49°58'N
144°58'W



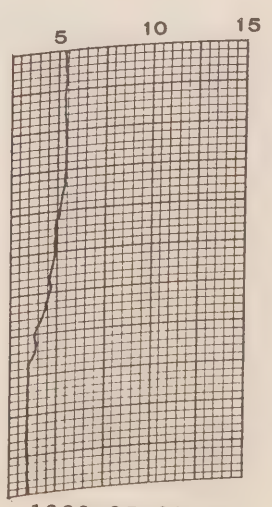
0300-05-04-65
49°58'N
144°55'W



0600-05-04-65
50°00'N
144°58'W

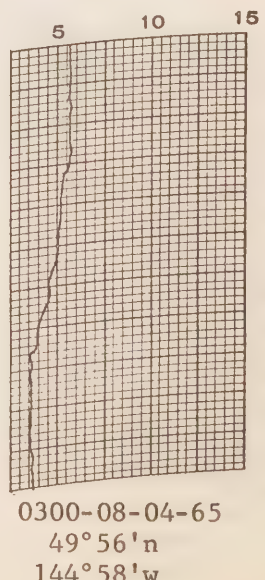
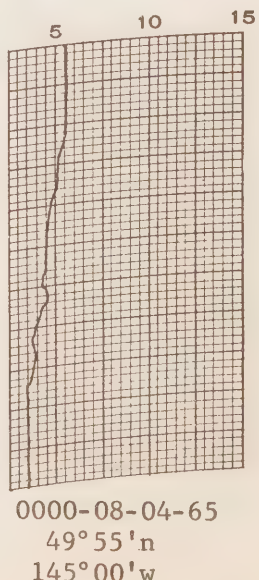
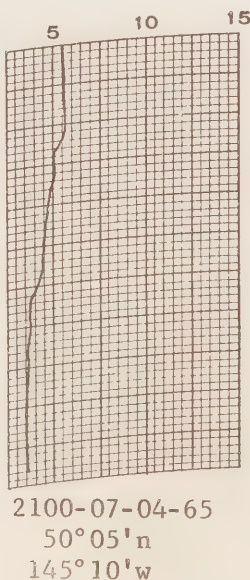
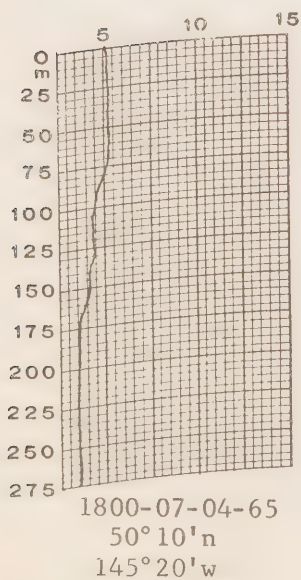
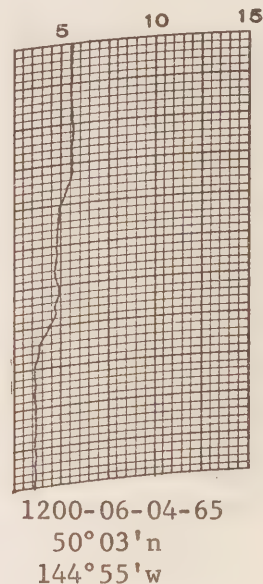
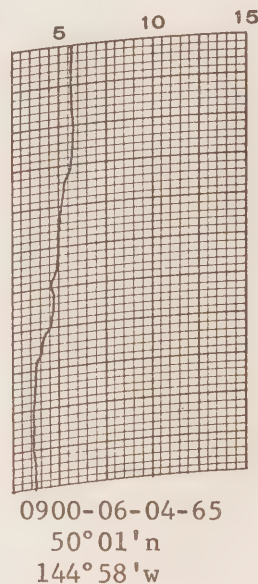
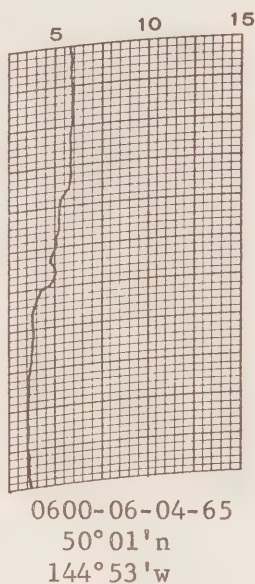
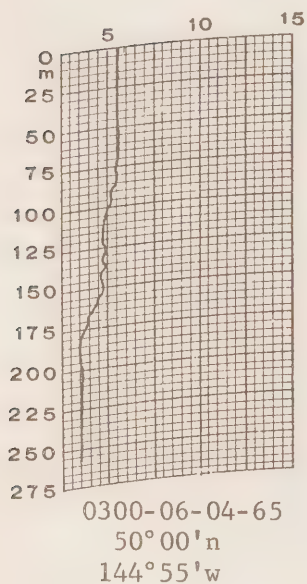
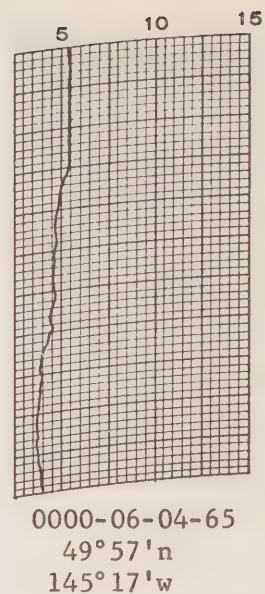
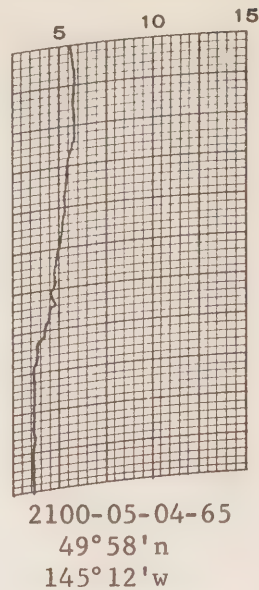
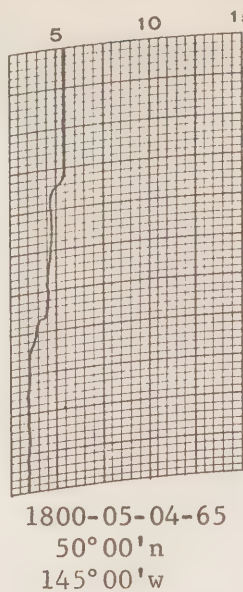
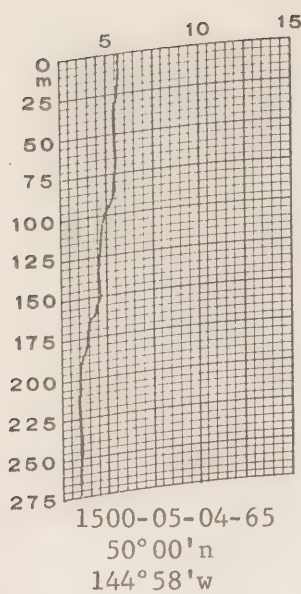


0900-05-04-65
50°02'N
145°00'W

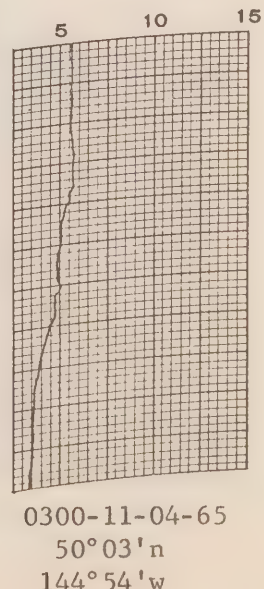
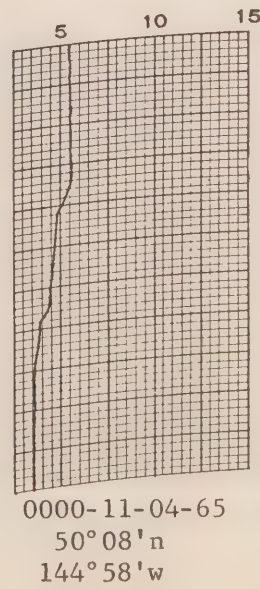
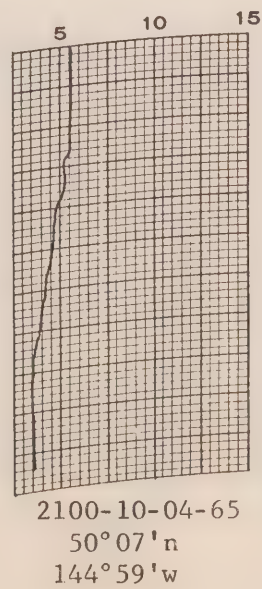
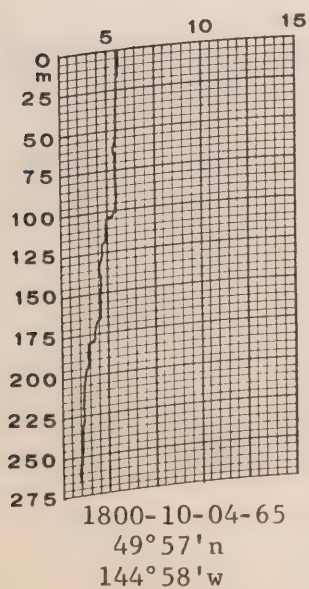
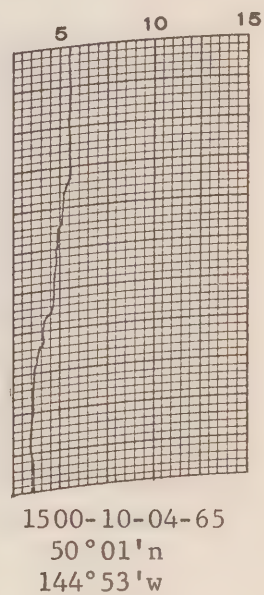
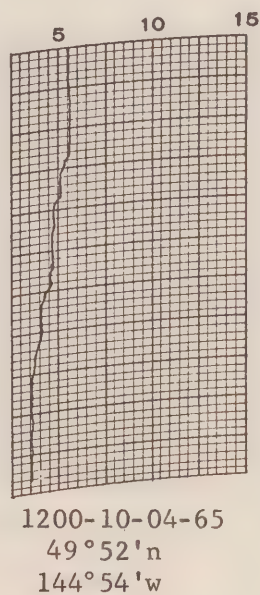
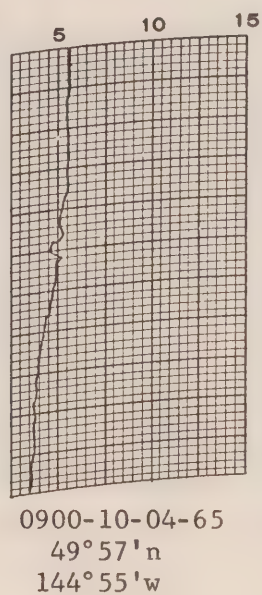
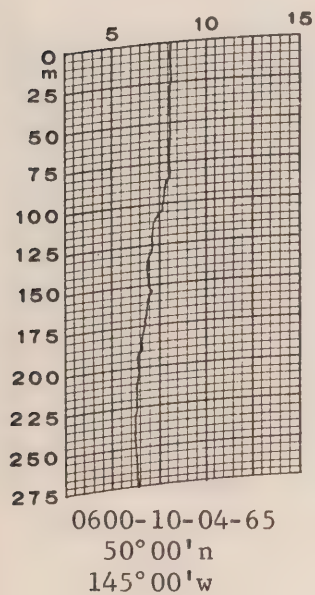
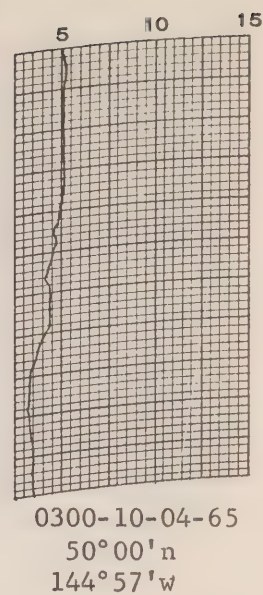
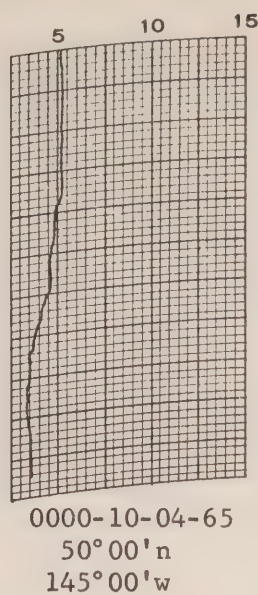
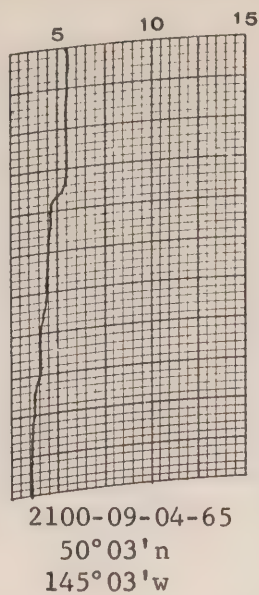
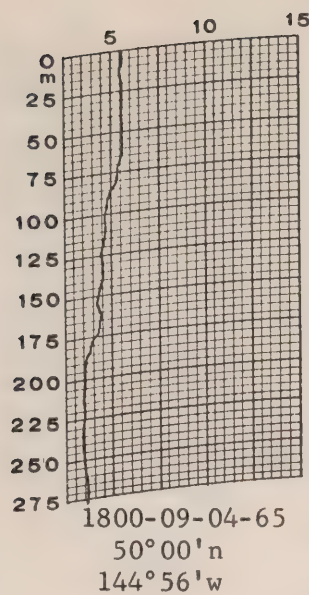


1200-05-04-65
49°58'N
145°02'W

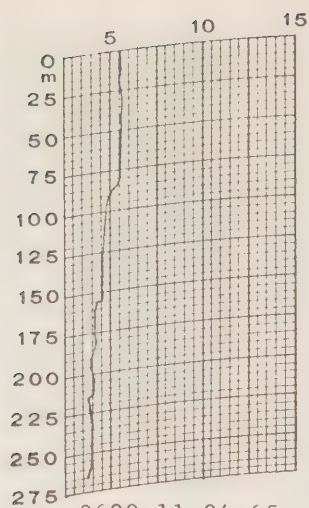
C.C.G.S. "Stonetown", Patrol No. 64



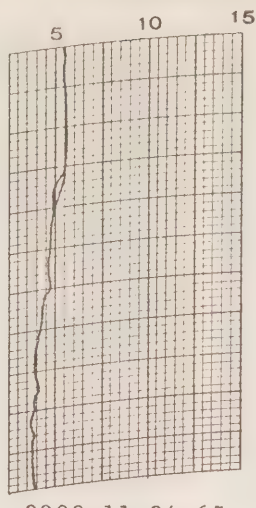
C.C.G.S. "Stonetown", Patrol No. 64



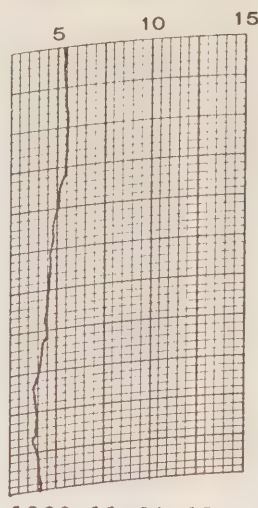
C.C.G.S. "Stonetown", Patrol No. 64



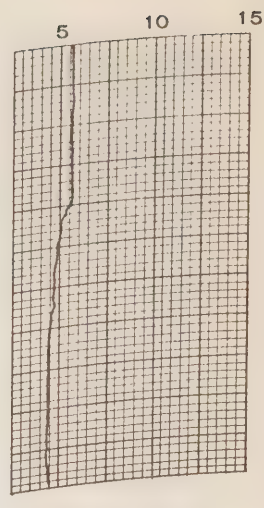
0600-11-04-65
49°55'n
144°58'w



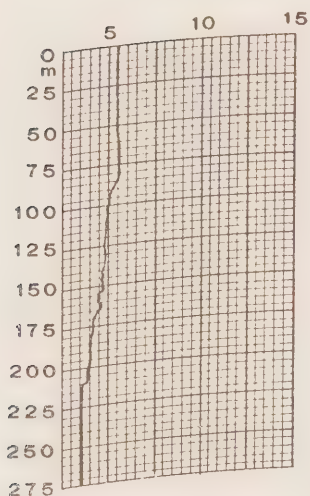
0900-11-04-65
49°54'n
144°57'w



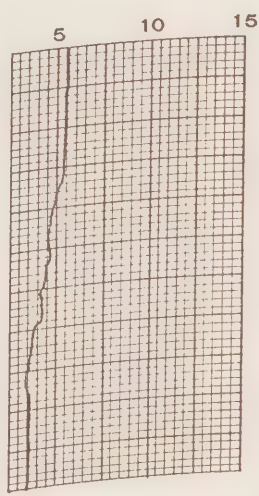
1200-11-04-65
49°52'n
145°00'w



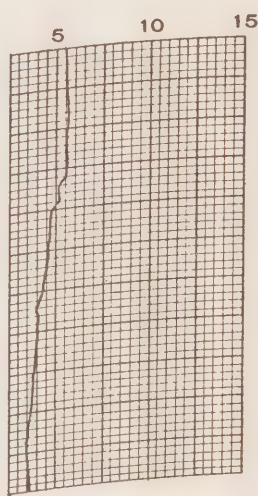
1500-11-04-65
50°01'n
144°57'w



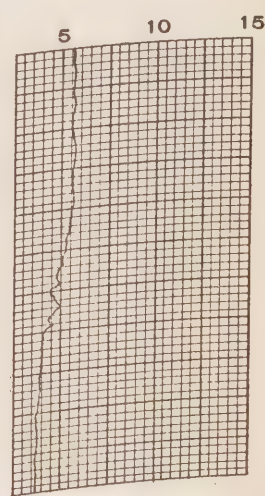
1800-11-04-65
50°04'n
144°54'w



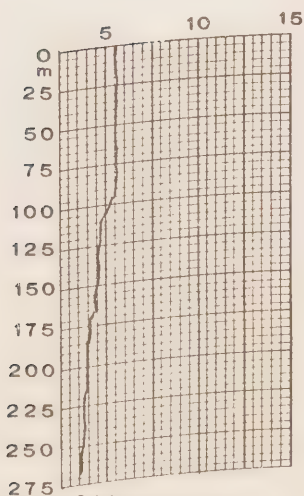
2100-11-04-65
50°00'n
144°49'w



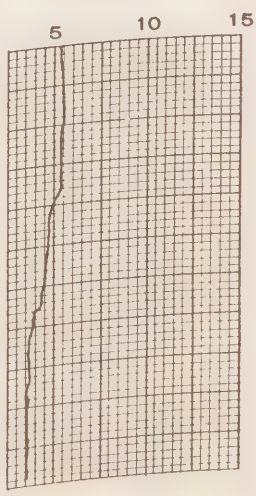
0000-12-04-65
50°00'n
144°57'w



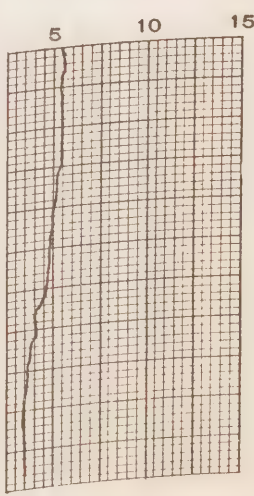
0300-12-04-65
49°59'n
144°54'w



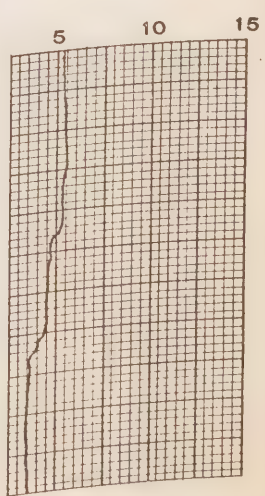
0600-12-04-65
50°00'n
144°55'w



0900-12-04-65
50°02'n
144°53'w

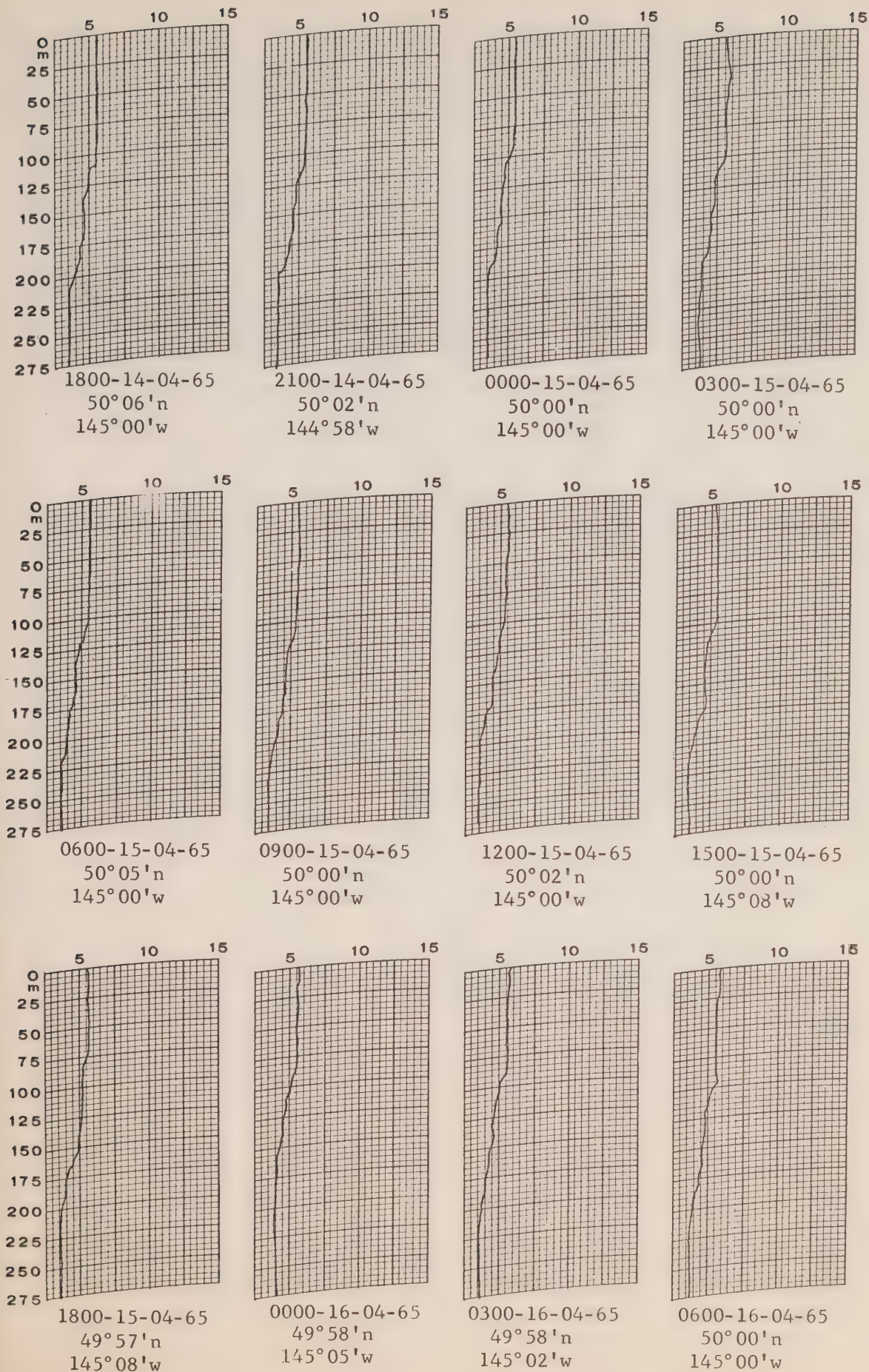


1200-12-04-65
50°04'n
145°00'w

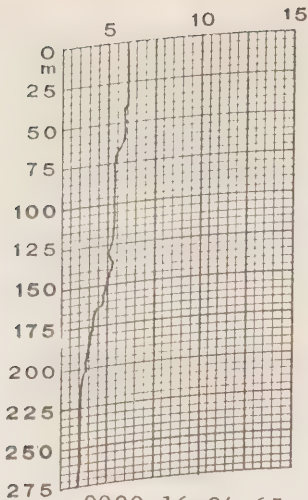


1500-12-04-65
49°59'n
144°56'w

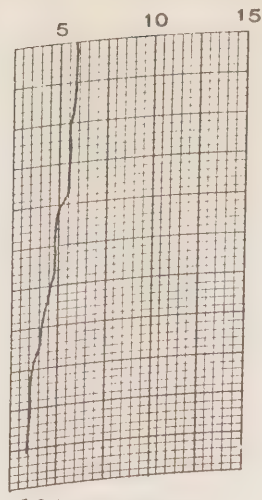
C.C.G.S. "Stonetown", Patrol No. 64



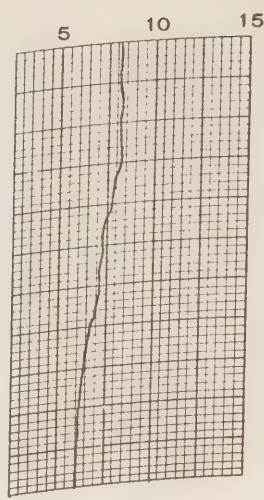
C.C.G.S. "Stonetown", Patrol No. 64



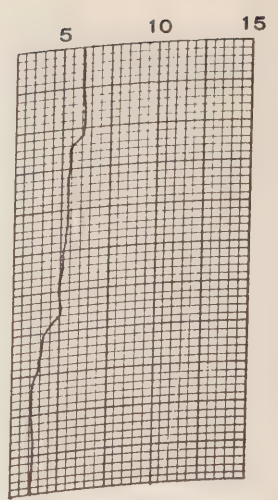
0900-16-04-65
49°53'n
145°03'w



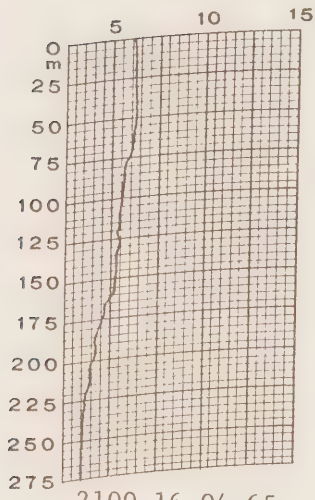
1200-16-04-65
50°03'n
144°58'w



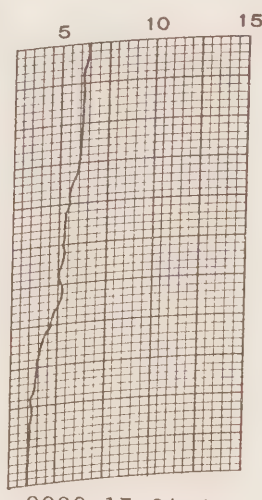
1500-16-04-65
50°01'n
145°00'w



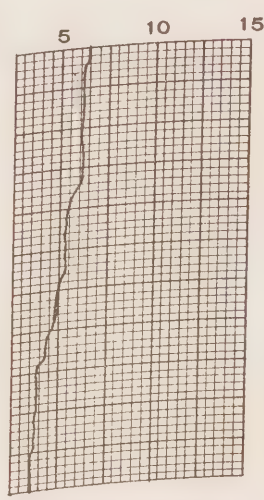
1800-16-04-65
50°00'n
145°00'w



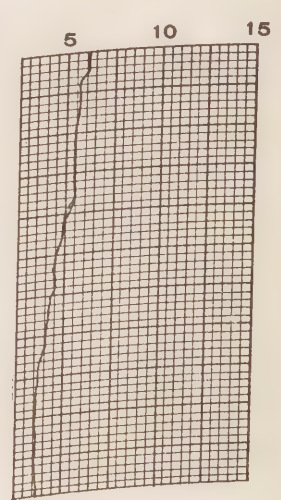
2100-16-04-65
49°58'n
145°00'w



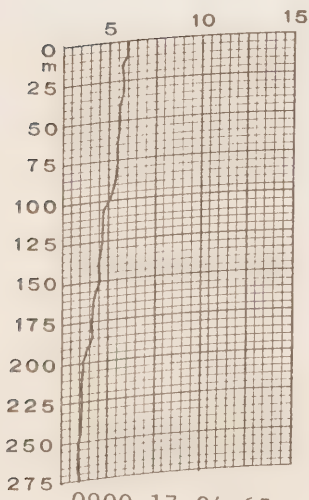
0000-17-04-65
49°56'n
145°03'w



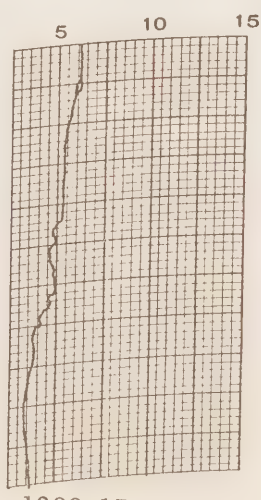
0300-17-04-65
49°50'n
145°00'w



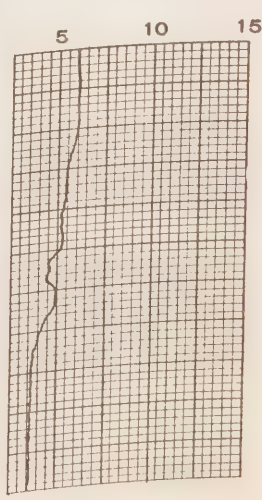
0600-17-04-65
50°04'n
145°00'w



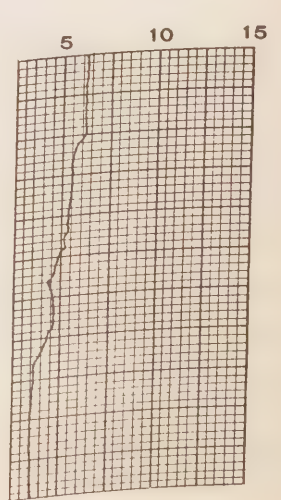
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145°00'w



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145°03'w

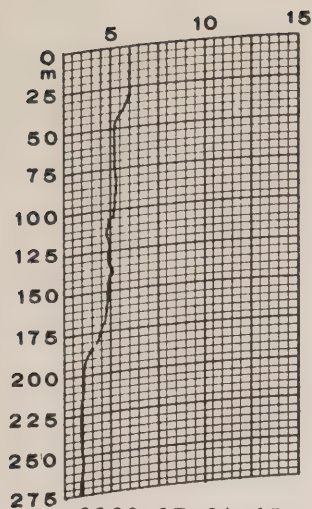


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145°05'w

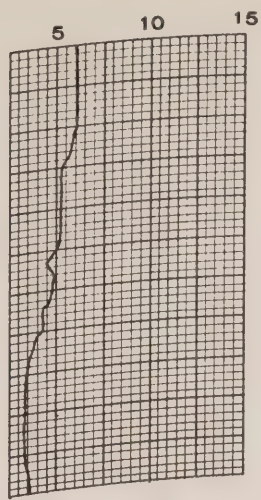


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49°57'n
145°05'w

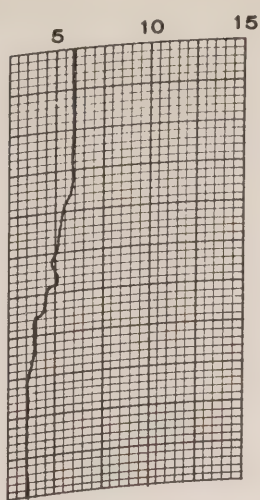
C.C.G.S. "Stonetown", Patrol No. 64



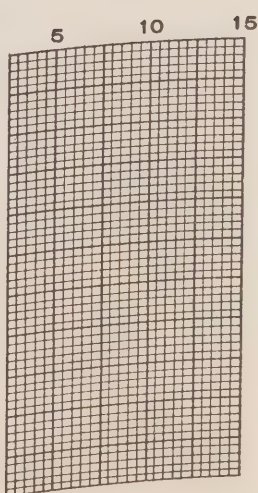
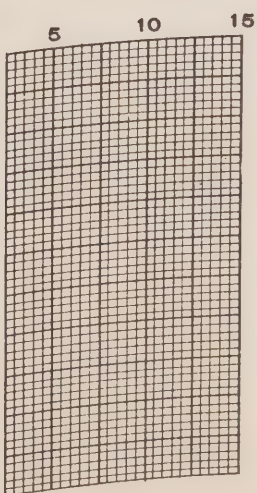
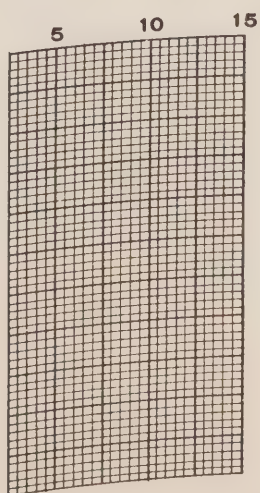
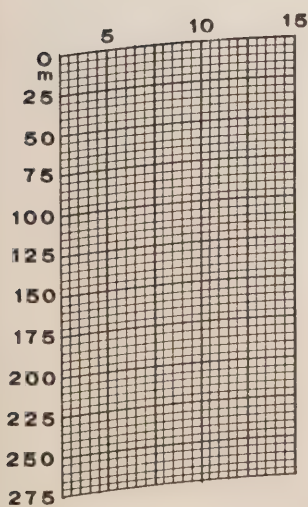
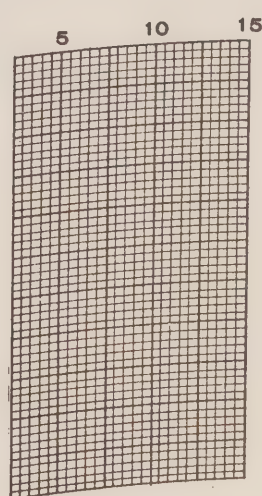
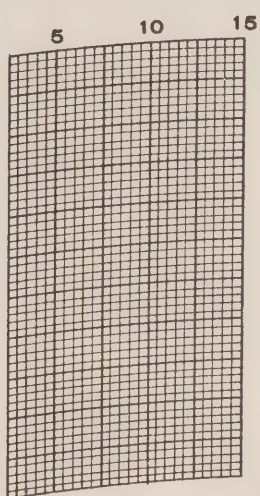
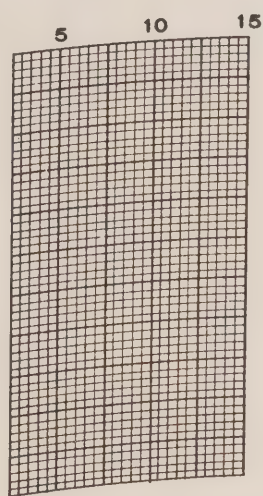
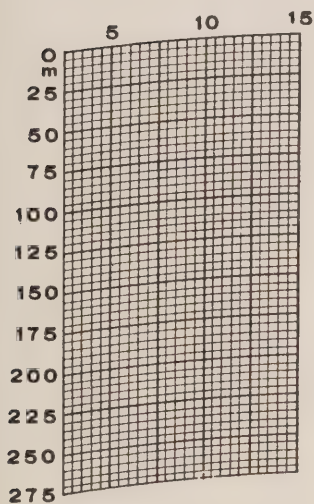
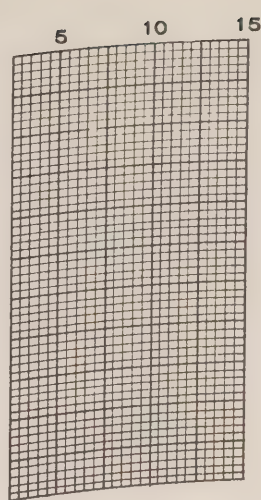
2100-17-04-65
49°58'N
145°07'W



0000-18-04-65
49°59'N
145°03'W



0415-19-04-65
50°01'N
144°40'W



SECTION V

Surface Salinity Data

Surface salinity observations, Ocean Weather Station "P"

Date - Time	Position		Salinity
GMT	Latitude	Longitude	‰
CCGS "St. Catharines", Survey P-65-1			
65-01-24-00.4	49°06'n.	131°40'w.	32.614
24-11.2	49°17'	134°40'	32.598
24-20.6	49°27'	137°40'	32.606
25-01.0	49°34'	138°40'	32.780
25-14.0	49°50'	140°40'	32.875
26-00.0	50°06'	144°47'	32.802
27-00.0	50°06'	144°56'	32.806
28-00.0	50°00'	145°00'	32.805
29-00.0	50°00'	145°00'	32.798
30-00.0	50°00'	145°00'	32.807
31-00.0	50°00'	145°00'	32.807
65-02-01-00.0	50°00'	145°00'	32.817
03-00.0	50°00'	145°00'	32.817
04-00.0	50°00'	145°00'	32.824
05-00.0	50°00'	145°00'	32.831
06-00.0	50°00'	145°00'	32.802
07-00.0	50°00'	145°00'	32.790
09-00.0	50°00'	145°00'	32.827
10-00.0	50°00'	145°00'	32.783
11-00.0	50°00'	145°00'	32.786
12-00.0	50°00'	145°00'	32.776
14-00.0	50°00'	145°00'	32.792
15-00.0	50°00'	145°00'	32.792
16-00.0	50°00'	145°00'	32.797
17-00.0	50°00'	145°00'	32.769
18-00.0	50°00'	145°00'	32.740
19-00.0	50°00'	145°00'	32.757
20-00.0	50°00'	145°00'	32.748
21-00.0	50°00'	145°00'	32.749
22-00.0	49°56'	144°54'	32.746
23-00.0	49°53'	145°08'	32.782
24-00.0	49°55'	144°51'	32.742
25-00.0	50°03'	145°05'	32.753
26-00.0	50°03'	145°07'	32.781
27-00.0	49°58'	144°56'	32.690
28-00.0	50°00'	144°55'	32.733

Surface salinity observations, Ocean Weather Station "P"

Date - Time	Position		Salinity
GMT	Latitude	Longitude	‰
CCGS "St. Catharines", Survey P-65-1			
65-03-02-00.0	49°50'	144°57'	32.721
05-00.0	49°57'	144°59'	32.753
06-00.0	49°50'	144°57'	32.763
08-20.8	49°40'	140°40'	32.709
08-23.8	49°37'	139°40'	32.696
09-06.3	49°28'	137°40'	32.591
09-13.2	49°25'	135°40'	32.573
09-19.3	49°14'	133°40'	32.663
10-02.0	49°06'	131°40'	32.605
10-05.5	49°02'	130°40'	32.363
10-07.8	48°55'	129°40'	32.320
10-17.3	48°41'	126°40'	29.842

CCGS "Stonetown", Patrol No. 64

65-03-10-00.0	50°00'n.	144°55'w.	32.712
11-00.0	49°50'	144°59'	32.762
12-00.0	50°10'	144°59'	32.749
13-00.0	50°03'	144°55'	32.758
14-00.0	50°08'	144°38'	32.818
15-00.0	50°01'	145°00'	32.762
16-00.0	49°59'	145°06'	32.734
17-00.0	50°03'	144°59'	32.736
18-00.0	50°02'	144°56'	32.764
19-00.0	49°50'	144°58'	32.397
20-00.0	50°06'	145°00'	32.746
21-00.0	50°03'	144°54'	32.718
22-00.0	50°10'	144°58'	32.723
23-00.0	50°03'	145°03'	32.734
24-00.0	50°09'	145°05'	32.723
25-00.0	50°01'	144°57'	32.319
26-00.0	50°01'	144°52'	32.702
27-00.0	50°02'	144°58'	32.724
28-00.0	50°00'	145°04'	32.723
29-00.0	50°01'	145°15'	32.723
30-00.0	49°57'	144°55'	32.729
31-00.0	50°00'	145°00'	32.746

Surface salinity observations, Ocean Weather Station "P"

Date - Time	Position		Salinity
GMT	Latitude	Longitude	‰
CCGS "Stonetown", Patrol No. 64			
65-04-01-00.0	50°00'	144°56'	32.702
03-00.0	49°56'	145°06'	32.708
04-00.0	50°02'	144°49'	32.726
05-00.0	49°58'	144°58'	32.728
06-00.0	49°57'	145°17'	32.734
07-00.0	50°00'	145°00'	32.729
08-00.0	49°55'	145°00'	32.729
09-00.0	50°00'	145°00'	32.779
10-00.0	50°05'	145°11'	32.557
11-00.0	50°08'	144°58'	32.680
12-00.0	50°00'	144°57'	32.580
13-00.0	50°00'	145°00'	32.732
14-00.0	49°56'	144°57'	32.674
15-00.0	50°00'	145°00'	32.729
16-00.0	49°58'	145°05'	32.336
17-00.0	49°56'	145°03'	32.779
18-00.0	49°59'	145°03'	32.718
19-00.0	50°00'	145°00'	32.769

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 in the
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NO.	TITLE	CODC REFERENCE
1	St. Lawrence Estuary	10-63-003
2	Gulf of St. Lawrence and Halifax Section	01-63-006
3	Ocean Weather Station "P"	02-64-004
4	Halifax Section and Scotian Shelf, 4 Surveys	01-63-007 10-64-004 10-64-005 14-64-003
5	Gulf of St. Lawrence	10-63-006
6	Gulf of St. Lawrence (Strait of Belle Isle)	10-63-004
7	Ocean Weather Station "P"	02-64-007
8	Ocean Weather Station "P"	02-64-010
9	Gulf of St. Lawrence	01-64-001
10	North Atlantic, East of Nova Scotia, South of Grand Banks, 2 Surveys	356 361
11	Baffin Bay, Smith Sound to Strait of Belle Isle	10-64-020
12	Saguenay and Gulf of St. Lawrence	13-63-003
13	Grand Banks to the Azores	10-64-009



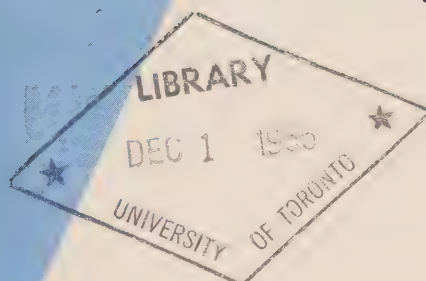
CANADA

WESTERN NORTH ATLANTIC AND CARIBBEAN SEA

February 1 to February 27, 1965

NO. 2

1966 Data Record Series



Canadian Oceanographic Data Centre

Programmed by the
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QUEEN'S PRINTER AND CONTROLLER OF STATIONERY
OTTAWA, 1966

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Price \$1.00

WESTERN NORTH ATLANTIC AND CARIBBEAN SEA

February 1 to February 27, 1965

CODC Reference: 03-65-001

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**Canadian Oceanographic Data Centre
615 Booth St., Ottawa, Canada**

Programmed by the Canadian Committee on Oceanography

FISHERIES RESEARCH BOARD OF CANADA

WESTERN NORTH ATLANTIC AND CARIBBEAN SEA

Ship:	CCGS "Hudson"
Local cruise designation:	BIO-3-65
Cruise period:	February 1 - February 27, 1965
Observers:	S.N. Tibbo Scientist in charge
	L.M. Lauzier
	J.G. Clark
	R.K. Robicheau
	A.W. Holt

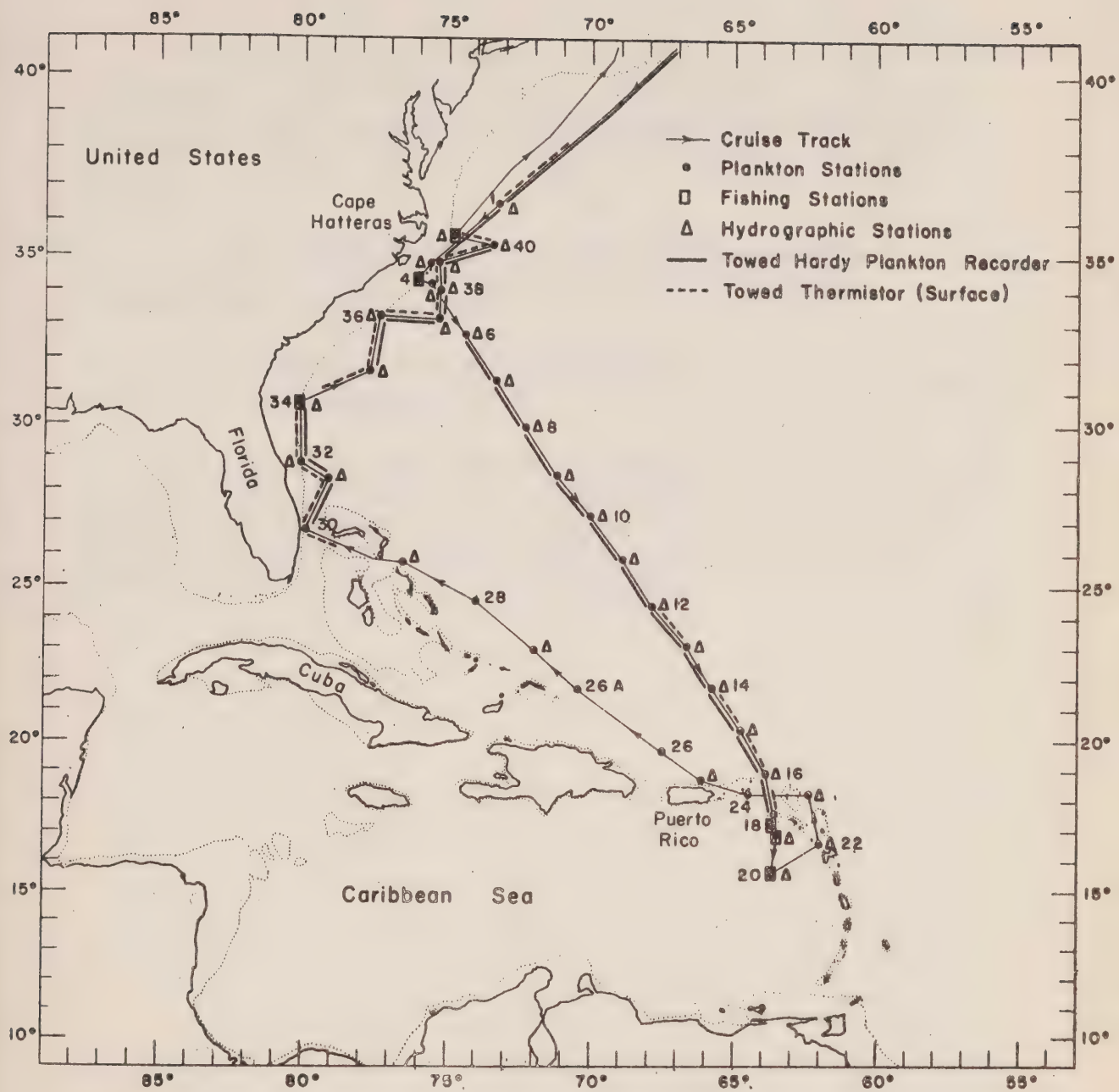
BIOLOGICAL STATION - St. Andrews, N.B.

SECTION I

Description of data collection procedures



USS Hudson (AGC-9) sailing on the water.



Track Chart

INTRODUCTION

The purpose of this survey was to obtain biological information on tuna and swordfish: mainly their distribution, movement, size, food and spawning areas; and environmental information such as temperature, salinity related to stratification, boundaries, and water masses.

A large amount of effort was spent on plankton sampling at various depths to provide information on the distribution of young swordfish and American eel larvae.

Oceanographic observations of temperature, salinity and oxygen are the only ones listed here.

A surface thermistor was towed during the cruise over a distance of approximately 1400 miles, more than half of this distance in the Florida current-- Gulf stream system. A total of 39 oceanographic stations was occupied along with 41 BT stations, water samples were drawn for 246 salinity and 236 dissolved oxygen determinations.

EXTRACT OF CRUISE LOG

Departed St. Andrews, N.B. - February 1, 1965
Arrive San Juan, P.R. - February 15, 1965
Departed San Juan, P.R. - February 17, 1965
Returned St. Andrews, N.B. - February 27, 1965

OBSERVATIONAL PROCEDURES

Oceanographic samples were collected at the surface, 50, 100, 200, 300, 400, and 500 metres at all deep stations. A 700 metre sample was added at every other deep station. In shallow waters, less than 200 metres, samples were taken at standard depths.

Meteorological observations were taken by the ship's officers.

LABORATORY PROCEDURES

Salinities were processed on a NIO conductivity bridge at Bedford Institute of Oceanography.

Dissolved oxygen was processed on board using the Winkler method.

BATHYTHERMOGRAPH DATA

BT slides were processed at Bedford Institute of Oceanography.

PERSONNEL

At Sea:

S.N. Tibbo	Scientist-in-charge
L.M. Lauzier	
A.C. Kohler	
W.B. Scott	
V.D. Vladykov	
M.R. Bartlett	
C.F. Monaghan	
A.W. Holt	
J.G. Clark	
P.W.G. McMullon	
R.K. Robicheau	

Data Analyses:

Compilation of Data	L.M. Lauzier J.G. Clark J.H. Hull H.M. Akagi
Salinity determinations	M.E. MacLean
B.T. Processing	T.A. Grant D.M. MacDonald
Dissolved oxygen determinations	L.M. Lauzier

SECTION II

Description of the machine-generated data record

INTRODUCTION

This section applies to the machine processing phase of the data reduction and computation.

The oceanographic data previously recorded on CODC data summary forms, a sample of which is shown on the next page, are transferred to punch-cards for subsequent electronic data processing on an IBM 1620 computer, using CODC's OCEANS II program. In addition to computing routine derived quantities, the program carries out unit and format conversions, range checks, plausibility tests, internal editing, and if required, interpolation at standard oceanographic depths. When interpolations are carried out, additional derived values are computed.

After the data have been processed, the data record is prepared using an IBM 1401 computer configuration with the OCEAN REPORT III program, which provides for pre-edited high speed print-out on continuous direct-image masters. These masters subsequently yield the required volume of copies for distribution.

Provision has been made to enter an **"estimate of precision"** for each observed variable selected for interpolation at standard oceanographic depths. The precision depends on the instrument and/or technique used to determine the variable. A standard precision stated as a **standard deviation** (σ) can be determined for each instrument or technique under routine field conditions by making duplicate determinations of the variables for a homogeneous sample of sea water. These standard deviations are given for each cruise under **"GENERAL INFORMATION"** in section III of the data record.

The **measurement error estimate** of a specific observation in this data record, is stated as a multiple of the standard deviation derived as above, and entered in a column immediately to the right of the reported variable. In order to distinguish it from an additional decimal digit, the measurement error estimate is recorded alphabetically, (i.e., $1\sigma = A$, $2\sigma = B$, etc.; in this data record "A" is suppressed).

An option is provided with respect to the measurement of the salinity variable. If observed to three decimal digits, the last digit takes the place of the measurement error estimate.

In the past, a number of methods for both manual and machine interpolation have been developed. Studies and comparisons of the several methods have shown that no single method is universally acceptable. The manual methods are the most elaborate and flexible, but often require subjective decisions. In machine interpolation, all the present methods fail to yield acceptable results under some circumstances. Hence, it is considered necessary to qualify interpolated values by stating an **"interpolation error estimate"** derived from the particular interpolation formula used. There are two purposes in stating the error estimates; **first**, to give an indication of the quality of the interpolated data; **second**, to allow the oceanographer to redesign his observational procedures in order to reduce interpolation errors in future observations.

The interpolation scheme chosen for the OCEANS II program consists of a combination of two 3-point interpolations using the Lagrangian interpolation polynomial, as recommended by Rattray (1962). A parabola is fitted through three values of a given variable (T , S , O_2) considered as a function of depth. The two interpolation parabolas require a total of four points (observed depths). The middle points are common to both parabolas. The average of the two values obtained from the parabolas at standard depth is taken as the interpolated value, and a function of their difference as an estimate of the interpolation error.

This function combined with the **"measurement error estimate"** comprises the **"combined measurement and interpolation error estimate"**. It is expressed as a multiple of the standard deviation of measurement (σ) under normal routine field conditions by:

CANADIAN OCEANOGRAPHIC DATA CENTRE

[illegible][illegible]

$$\frac{\sigma_i}{\sigma} = \left\{ \frac{(\Delta V_i)^2}{\sigma^2} + \sum_{n=j-2}^{j+1} (\gamma_n)^2 \left(\frac{\sigma_n}{\sigma} \right)^2 \right\}^{1/2}, \text{ where}$$

σ = Standard deviation of the combined error estimates at standard oceanographic depth,
 ΔV_i = the interpolation error estimate of variable "V" at standard oceanographic depth = $^{1/3} (\bar{V}_{i_1} - V_{i_2})$
 γ = Interpolation polynomial coefficient.

Z_j = Observed depth.

Z_i = Standard oceanographic depth, such that: $Z_{j-2} < Z_{j-1} < Z_i < Z_j < Z_{j+1}$

The integral part of the fraction $\frac{\sigma_i}{\sigma}$, if ≥ 2 , is reported in this Data Record following the interpolated variable. It represents the combined measurement and interpolation error estimate. In order to distinguish it from an additional decimal digit, it is recorded alphabetically (e.g.: 2 as "B", 3 as "C", etc.).

With respect to the interpolated value of the salinity variable if reported to three decimal digits, the interpolation error estimate is given only when $\frac{\sigma_i}{\sigma} \geq 2$ (the salinity is then recorded to two decimal places). If less than 2, the mean obtained from the two interpolation parabolas is reported to three decimal places.

EXPLANATION OF DATA RECORD HEADINGS

MASTER HEADINGS

(1) C-REF-NO	(6) YR	(11) DEPTH	(16) WAVES 1	(21) AIR T	(26) VIS
(2) CONS. NO	(7) MONTH	(12) MXSAMPD	(17) WAVES 2	(22) WET B	(27) STN
(3) LAT	(8) DAY	(13) NO. DPTH	(18) WND-DIR	(23) WW-CODE	
(4) LON	(9) HR	(14) W-COLOR	(19) WND-FCE	(24) CLD-TPE	
(5) MARSD SQ	(10) C/I	(15) W-TRNSP	(20) BARO	(25) CLD-AMT	(28) HW

(1) CRUISE REFER-
ENCE NUMBER:

Assigned by the Institute. Commences with 001 at the beginning of each year (effective Jan. 1, 1963). Prior to that date the CRN was a number designated by CODC.

(2) CONSECUTIVE
NUMBER:

Indicates the chronological order in which the stations were occupied.

(3) LATITUDE:

Indicate the position of the platform at the time of observation.

(4) LONGITUDE:

(5) MARSDEN SQUARE: Designates the geographic area code of the observation (see Marsden square chart).

(6) YEAR:

(7) MONTH:

(8) DAY:

(9) HOUR:

The time (Greenwich Mean Time) at which the surface environmental data were recorded. It is reported to tenths of hours (Table 1).
If an "X" precedes the value for HOUR, (prior to Jan. 1, 1963) it indicates that the reported time is doubtful.

(10) COUNTRY/
INSTITUTE:

The International Geophysical Year (IGY) Country Code/Institute Code - see Table 11.

(11) DEPTH:

The sounding reported in metres. If corrected, this is stated in the "GENERAL INFORMATION" chapter of section III. Charted depths are preceded by the letter "C".

(12) MAXIMUM

SAMPLING DEPTH: A code to indicate the deepest sampling depth (used for high speed sorting).

00 m - 50 m = 00
51 m - 150 m = 01
151 m - 250 m = 02
etc.

- (13) NUMBER OF DEPTHS: The number of levels observed (this is entered to initiate a computer safety check, guarding against the loss of punch-cards).
- (14) WATER COLOUR: The Forel-Ule Code (see table 2 and NOTE under FIELD "15" below).
- (15) WATER TRANSPARENCY: The depth in metres at which a Secchi disc (white disc, 30 cm. in diameter) just disappears from view, or the optical density expressed in percentage;

NOTE: The "GENERAL INFORMATION" chapter in section III of the data record will state which method was used.

- (16) WAVES 1
($d_W d_W P_W H_W$ -code): The direction, period and height of the **wind-propagated** wave system. (See Tables 3, 4 and 5). Ref: World Meteorological Organization Codes 0885, 3155, 1555.
- (17) WAVES 2
($d_W d_W P_W H_W$ -code): The direction, period and height of the predominant **non-wind-propagated** wave system. (See Tables 3, 4 and 5). Ref: World Meteorological Organization Codes 0885, 3155, 1555.
- (18) WIND DIRECTION: The true direction to the nearest 10 degrees from which the wind is blowing (wind direction 990 means:—wind variable or direction unknown).
- (19) WIND FORCE
(WND-FCE): Beaufort notation (See Table 6).
- WIND SPEED
(WND-SPD): Anemometer reading reported in metres per second. Instrument height reported in "GENERAL INFORMATION" chapter of section III.
- (20) BAROMETER: The barometric pressure reported in millibars: the "GENERAL INFORMATION" chapter in Section III of the data record will state the type of instrument used.
- (21) AIR TEMPERATURE: In degrees Celsius.
- (22) WET BULB: In degrees Celsius.
- (23) ww CODE: Present Weather Code (See Table 7). Ref: WMO Code 4677
- (24) CLOUD TYPE: The type of predominating clouds (See Table 8). Ref: WMO Code 0500.
- (25) CLOUD AMOUNT: The sky coverage in eighths (See Table 9) Ref: WMO Code 2700
- (26) VISIBILITY: Visibility at the surface (See Table 10). Ref: WMO Code 4300.
- (27) STATION: A station reference number, assigned by the institute prior to, or during the survey.
- (28) HOURS AFTER HIGH WATER: Indicates the state of the tide for nearshore observations.

OBSERVED DATA HEADINGS

(1) GMT	(2) DEPTH	(3) TEMP	(4) SAL	(5) OXYGEN	(6) SGMT
(7) SOUND	(8) PO_4	(9) -P-	(10) NO_2	(11) NO_3	(12) SiO_2
				(13) pH.	

NOTE: Headings (1) to (7) will always be present. Headings (8) to (13) appear only when one or more additional chemical entries were made.

(1) G.M.T.: The Greenwich Mean Time of (in-situ) thermometer inversion and sea water sample collection.

When a multiple cast was initiated prior to and continued after midnight, the times indicated are uninterrupted by the change of day and appear beyond 24.0 hours. This will be accompanied by a statement: "MULTIPLE CAST CONTINUED NEXT DAY", which is printed following the last level of observed values.

(2) DEPTH: The depth in metres at the reversal time of deepest cast.

(3) TEMPERATURE: Temperatures from deepsea reversing thermometers, read to 0.01° C. Surface temperature measurement procedures are described in the chapter "OBSERVATION PROCEDURES" of section I, and/or the "GENERAL INFORMATION" chapter of section III. An alphabetical character following the temperature value represents the measurement error estimate referred to in the INTRODUCTION to this section.

(4) SALINITY: Salinity as defined by: $S = 0.03 + 1.805 \text{ Cl}\%$, reported in:
a. 1/100 parts per 1000, or
b. 1/1000 parts per 1000.

In case a: an alphabetical character following the value is the measurement error estimate as referred to under (3).

In case b: no error estimate indication is provided for, but an additional decimal digit takes its place.

(5) OXYGEN: The concentration of dissolved oxygen expressed in millilitres per litre to 2 decimal places. An alphabetical character following the value is the measurement error estimate as referred to under (3).

(6) SIGMA-T: The specific gravity anomaly as defined by: $(\text{Specific gravity} - 1) \times 10^3$ (e.g., σ_t reported as 2456, reads 24.56, and corresponds to a specific gravity of 1.02456).

(7) SOUND: The sound velocity is reported in m/sec. to 1 decimal place (e.g., 1437.9 m/sec.). The computation is carried out using Wilson's formula (1960), expressed in terms of temperature, salinity and total pressure.

(8) PO ₄	Phosphate-Phosphorus reported to hundredths of microgram-atoms per litre.
(9) -P-	Total Phosphorus reported to hundredths of microgram-atoms per litre.
(10) NO ₂	Nitrite-Nitrogen reported to hundredths of microgram-atoms per litre — No dissolved nitrogen included —
(11) NO ₃	Nitrate-Nitrogen reported to tenths of microgram-atoms per litre.
(12) SiO ₂	Silicate-Silicon reported in whole microgram-atoms per litre.
(13) pH	The pH value.

NOTE: "TRC" (trace) is reported when a chemical entry has a value less than the standard deviation of measurement for that particular variable.

INTERPOLATED DATA HEADINGS

(1) DEPTH	(2) TEMP	(3) SAL	(4) OXYGEN	(5) SGMT	(6) SOUND
(7) DELTA-D	(8) POT-EN	(9) SVA.			

- (1) DEPTH: Standard Oceanographic Depth in whole metres, as well as additional depths: 125, 175, 225, 3500, 4500, 5500, 6500, 7500, 8500, 9500.
- (2) TEMPERATURE: Interpolated value at standard depth, followed by the combined measurement and interpolation error estimate (see "INTRODUCTION" to section II of the data record).
- (3) SALINITY:
- A. The reported salinity values are measured to three decimal places.
 - (i) the interpolation error estimate is less than twice the standard deviation of measurement
 - the interpolated value is reported to three decimal places (e.g., 30.139).
 - (ii) the interpolation error estimate is equal to or greater than twice the standard deviation of measurement.
 - the interpolated value is reported to two decimal places, and followed by the interpolation error estimate (e.g., 29.23 C).
 - B. The reported salinity values are measured to two decimal places and followed by the measurement error estimate.
 - the interpolated value is reported to two decimal places, and followed by the combined measurement and interpolation error estimate (e.g., 30.59 B).
- (4) OXYGEN: Interpolated value at standard depth, followed by the combined measurement and interpolation error estimate (see "Introduction" to section II of the data record).

- (5) SIGMA-T: Computed from temperature and salinity values at standard oceanographic depth.
- (6) SOUND VELOCITY: Computed from temperature, salinity and total pressure values at standard oceanographic depth, using Wilson's formula (1960).
- (7) DELTA-D: The geo-potential anomaly as defined by:
- $$\Delta D = \int_0^p \delta dp$$
- ΔD is expressed in dynamic metres (10^5 ergs/gram) and recorded to three decimal places (e.g., 2.345 dyn. metres).
- (8) POTENTIAL ENERGY ANOMALY: The Potential energy anomaly χ as defined by:
- $$\chi = 1/g \int_0^p p \delta dp = \int_0^z \rho p \delta dz$$
- χ is expressed in units of 10^6 ergs/cm² and recorded to two decimal places (e.g., 116.44).
- (9) SPECIFIC VOLUME ANOMALY: The specific volume anomaly as defined by:
- $$\delta = \alpha - \alpha_{35.0.P}$$
- δ is expressed in ml/gr, and conventionally reported as $10^5 \delta$, to one decimal place (i.e., δ reported as 1234, reads 123.4, and corresponds to a specific volume anomaly of 0.001234 ml/gr.).

SPECIAL CHARACTERS

‡ (Record mark): is used to indicate inconsistencies which are printed in an area below the "Observed Data". A corresponding record mark at the extreme left hand side indicates the level at which the inconsistency occurs

* (Asterisk): this character may occur in the **interpolated** portion of the data record. It is printed at the extreme left hand side of the page, when three or more standard depth levels fall within any one **observed depth interval**. The **third**, and all consequent levels are preceded by the asterisk to indicate that more than **two** machine interpolations were carried out, utilizing the same set of interpolation parabolas. The asterisk will also appear when the last standard depth is an extrapolation and there are at least two interpolations between the last two observed depths.

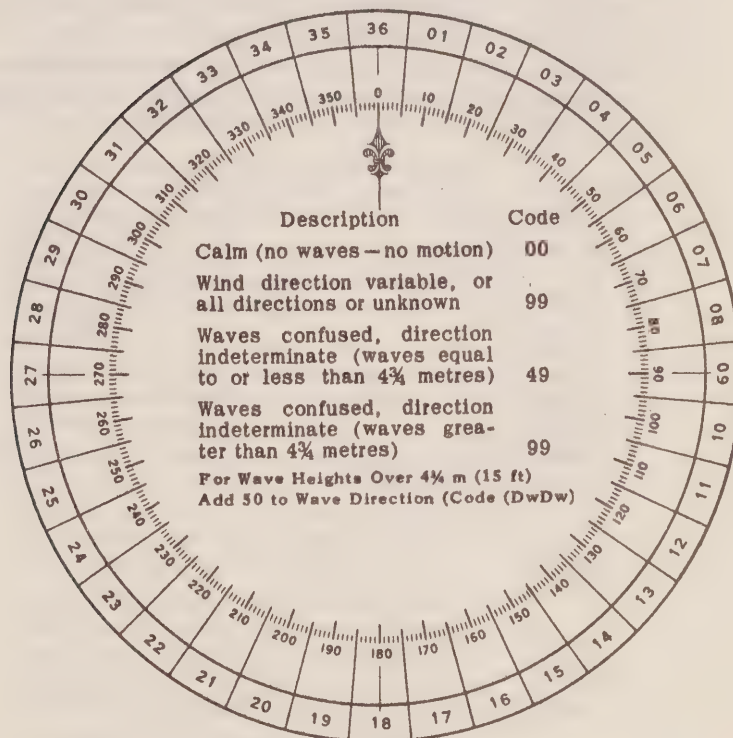
Table 1
CONVERSION
MINUTES TO $\frac{1}{10}$ HRS.

Minutes	Tenths Hrs.
00-03	0
04-08	1
09-15	2
16-20	3
21-27	4
28-32	5
33-39	6
40-44	7
45-51	8
52-56	9
57-59	0 (next HR.)

Table 2
WATER COLOR CODE
Based on Percentage Yellow

Code:	Description
00	Deep Blue
10	Blue
20	Greenish Blue
30	Bluish Green
40	Green
50	Light Green
60	Yellowish Green
70	Yellow Green
80	Green Yellow
90	Greenish Yellow
99	Yellow

Table 3. DIRECTION CODE (dd)



NOTE:

Always use the true direction from which the wind is blowing, or the direction from which Waves I (sea), or Waves II (swell) come.

Table 4. PERIOD OF THE WAVES (P_w)
(Measure to the Nearest Second)

Code:	Period in Seconds:	Code:	Period in Seconds:
2	5 sec. or less	8	16 or 17 sec.
3	6 or 7 sec.	9	18 or 19 sec.
4	8 or 9 sec.	0	20 or 21 sec.
5	10 or 11 sec.	1	Over 21 sec.
6	12 or 13 sec.	X	Calm, or period not determined
7	14 or 15 sec.		

Table 5. HEIGHT OF THE WAVES (H_w)

- The average value of the wave height (vertical distance between trough and crest) is reported, as obtained from the larger well formed waves of the wave system being observed.
- Each code figure provides for reporting a range of heights. For example: 1 = $\frac{1}{4}$ m (1 ft) to $\frac{3}{4}$ m (2½ ft); 5 = $2\frac{1}{4}$ m (7 ft) to $2\frac{3}{4}$ m (9 ft); 9 = $4\frac{1}{4}$ m (13½ ft) to $4\frac{3}{4}$ m (15 ft), etc.
- If a wave height comes exactly midway between the heights corresponding to two code figures, the lower code figure is reported; e.g. a height of $2\frac{1}{4}$ m is reported by code figure 5.

Code			Code
0	Less than ¼ m (1 ft)	Add 50 to Dw Dw	0 5 m (16 ft)
1	½ m (1½ ft)		1 5½ m (17½ ft)
2	1 m (3 ft)		2 6 m (19 ft)
3	1½ m (5 ft)		3 6½ m (21 ft)
4	2 m (6½ ft)		4 7 m (22½ ft)
5	2½ m (8 ft)		5 7½ m (24 ft)
6	3 m (9½ ft)		6 8 m (25½ ft)
7	3½ m (11 ft)		7 8½ m (27 ft)
8	4 m (13 ft)		8 9 m (29 ft)
9	4½ m (14 ft)		9 9½ m (30½ ft) or more
x	Height not determined		

Table 6. WIND FORCE CODE

The Beaufort force of the wind is estimated from the appearance of the sea surface, according to the table below. This table is only intended as a guide to show roughly what may be expected on the open sea, remote from land. Factors which must be taken into account are the "lag" effect between the wind increasing and the sea getting up; and the influence of "fetch", depth, swell, heavy rain and tide effect on the appearance of the sea. Estimation of the wind force by this method becomes unreliable in shallow water or when close inshore, owing to the tidal effect and the shelter provided by the land.

Code	Appearance of sea if fetch and duration of the blow have been sufficient to develop the sea fully	Description
00	Sea like a mirror	Calm
01	Ripples with the appearance of scales are formed, but without foam crests.	Light Air
02	Small wavelets; crests have a glassy appearance and do not break.	Light Breeze
03	Large wavelets; crests begin to break; foam of glassy appearance; perhaps scattered white horses.	Gentle Breeze
04	Small waves, becoming longer; fairly frequent white horses.	Moderate breeze
05	Moderate waves; many white horses are formed (chance of some spray)	Fresh Breeze
06	Large waves; white foam crests everywhere (probably some spray)	Strong Breeze
07	Sea heaps up and white foam from breaking waves begins to be blown in streaks along the direction of the wind.	Near Gale
08	Moderately high waves; edges of crests begin to break into the spindrift; foam is blown in well-marked streaks along the direction of the wind.	Gale
09	High waves; dense streaks of foam along wind; crests begin to topple, tumble and roll over; spray may affect visibility.	Strong Gale
10	Very high waves with long overhanging crests; foam in great patches blown in dense white streaks along wind; sea surface takes a white appearance; tumbling becomes heavy and shock-like; visibility affected.	Storm
11	Exceptionally high waves (medium sized ships may be lost to view behind waves); sea covered with long white patches of foam lying along the wind; everywhere edges of crests are blown into froth; visibility affected.	Violent Storm
12	Air is filled with foam and spray; sea completely white with driving spray; visibility seriously affected.	Hurricane

Table 7. PRESENT WEATHER

W.W. CODE

NO PRECIPITATION ON STATION AT TIME OF OBSERVATION

Code figure ww			
No meteors except photometers	00	Cloud development not observed or not observable	characteristic change of the state of sky during the past hour
	01	Clouds generally dissolving or becoming less developed	
	02	State of sky on the whole unchanged	
	03	Clouds generally forming or developing	
Haze, dust, sand or smoke	04	Visibility reduced by smoke, e.g. veldt or forest fires, industrial smoke or volcanic ashes	
	05	Haze	
	06	Widespread dust in suspension in the air, not raised by wind at or near the station at the time of observation	
	07	Dust or sand raised by wind at or near the station at the time of observation, but no well developed dust whirl(s) or sand whirl(s), and no duststorm or sandstorm seen	
	08	Well developed dust whirl(s) or sand whirl(s) seen at or near the station during the preceding hour or at the time of observation, but no dustorm or sandstorm	
	09	Duststorm or sandstorm within sight at the time of observation, or at the station during the preceding hour	
	10	Mist	
	11	Patches of } shallow fog or ice fog at the station, whether on land or sea, not deeper than about 2 metres on land or 10 metres at sea	
	12		
	13	Lightning visible, no thunder heard	
	14	Precipitation within sight, not reaching the ground or the surface of the sea	
	15	Precipitation within sight, reaching the ground or the surface of the sea, but distant (i.e. estimated to be more than 5 km) from the station	
	16	Precipitation within sight, reaching the ground or the surface of the sea, near to, but not at the station	
	17	Thunderstorm, but no precepitation at the time of observation	
	18	Squalls	} at or within sight of the station during the preceding hour or at the time of observation
	19	Funnel clouds	
ww = 20 - 29			
	20	Precipitation, fog, ice fog or thunderstorm at the station during the preceding hour but not at the time of observation	
	21	Drizzle (not freezing) or snow grains	} not falling as shower(s)
	22	Rain (not freezing)	
	23	Snow	
	24	Rain and snow or ice pellets, type (a)	
	25	Freezing drizzle or freezing rain	
	26	Shower(s) of rain	
	27	Shower(s) of snow, or of rain and snow	
	28	Shower(s) of hail, or of rain and hail	
	29	Fog or ice fog	
	29	Thunderstorm (with or without precipitation)	
ww = 30 - 39			
	30	Duststorm, sandstorm, drifting or blowing snow	
	31	Slight or moderate duststorm or sandstorm	} - has decreased during the preceding hour
	32		
	33	Severe duststorm or sandstorm	} - no appreciable change during the preceding hour
	34		
	35		} - has begun or has increased during the preceding hour
	36		
	37	Slight or moderate blowing snow	} generally low (below eye level)
	38	Heavy drifting snow	
	39	Slight or moderate blowing snow	} generally high (above eye level)
	40	Heavy blowing snow	
ww = 40 - 49			
	40	Fog or ice fog at the time of observation	
	41	Fog or ice fog at a distance at the time of observation, but not at the station during the preceding hour, the fog or ice fog extending to a level above that of the observer	
	42	Fog or ice fog in patches	
	43	Fog or ice fog, sky visible	} has become thinner during the preceding hour
	44	Fog or ice fog, sky invisible	
	45	Fog or ice fog, sky visible	} no appreciable change during the preceding hour
	46	Fog or ice fog, sky invisible	
	47	Fog or ice fog, sky visible	} has begun or has become thicker during the preceding hour
	48	Fog or ice fog, sky invisible	
	49	Fog, depositing rime, sky visible	
	49	Fog, depositing rime, sky invisible	

NO PRECIPITATION ON STATION AT TIME OF OBSERVATION

PRECIPITATION ON STATION AT TIME OF OBSERVATION

ww = 50 - 59 Drizzle

- | | | |
|----|--|--|
| 50 | Drizzle, not freezing, intermittent | } slight at time of observation |
| 51 | Drizzle, not freezing, continuous | |
| 52 | Drizzle, not freezing, intermittent | } moderate at time of observation |
| 53 | Drizzle, not freezing, continuous | |
| 54 | Drizzle, not freezing, intermittent | } heavy (dense) at time of observation |
| 55 | Drizzle, not freezing, continuous | |
| 56 | Drizzle, freezing, slight | |
| 57 | Drizzle, freezing, moderate or heavy (dense) | |
| 58 | Drizzle and rain, slight | |
| 59 | Drizzle and rain, moderate or heavy | |

ww = 60 - 69 Rain

- | | | |
|----|---|-----------------------------------|
| 60 | Rain, not freezing, intermittent | } slight at time of observation |
| 61 | Rain, not freezing, continuous | |
| 62 | Rain, not freezing, intermittent | } moderate at time of observation |
| 63 | Rain, not freezing, continuous | |
| 64 | Rain, not freezing, intermittent | } heavy at time of observation |
| 65 | Rain, not freezing, continuous | |
| 66 | Rain, freezing, slight | |
| 67 | Rain, freezing, moderate or heavy | |
| 68 | Rain or drizzle and snow, slight | |
| 69 | Rain or drizzle and snow, moderate or heavy | |

70 - 79 Solid precipitation not in showers

- | | | |
|----|---|-----------------------------------|
| ww | | |
| 70 | Intermittent fall of snow flakes | } slight at time of observation |
| 71 | Continuous fall of snow flakes | |
| 72 | Intermittent fall of snow flakes | } moderate at time of observation |
| 73 | Continuous fall of snow flakes | |
| 74 | Intermittent fall of snow flakes | } heavy at time of observation |
| 75 | Continuous fall of snow flakes | |
| 76 | Ice prisms (with or without fog) | |
| 77 | Snow grains (with or without fog) | |
| 78 | Isolated starlike snow crystals (with or without fog) | |
| 79 | Ice pellets, type (a) | |

ww = 80 - 99 Showery precipitation, or precipitation with current or recent thunderstorm

- | | | |
|----|--|---|
| 80 | Rain shower(s), slight | |
| 81 | Rain shower(s), moderate or heavy | |
| 82 | Rain shower(s), violent | |
| 83 | Shower(s) of rain and snow mixed, slight | |
| 84 | Shower(s) of rain and snow mixed, moderate or heavy | |
| 85 | Snow shower(s), slight | |
| 86 | Snow shower(s), moderate or heavy | |
| 87 | Shower(s) of snow pellets or ice pellets, type (b), with or without rain or rain and snow mixed | } - slight |
| 88 | | |
| 89 | Shower(s) of hail, with or without rain or rain and snow mixed, not associated with thunder | } - moderate or heavy |
| 90 | | |
| 91 | Slight rain at time of observation | |
| 92 | Moderate or heavy rain at time of observation | } thunderstorm during the preceding hour but not at time of observation |
| 93 | Slight snow, or rain and snow mixed or hail at time of observation | |
| 94 | Moderate or heavy snow, or rain and snow mixed or hail at time of observation | |
| 95 | Thunderstorm, slight or moderate, without hail, but with rain and/or snow at time of observation | } thunderstorm at time of observation |
| 96 | Thunderstorm, slight or moderate, with hail at time of observation | |
| 97 | Thunderstorm, heavy, without hail, but with rain and/or snow at time of observation | |
| 98 | Thunderstorm, combined with duststorm or sandstorm at time of observation | |
| 99 | Thunderstorm, heavy, with hail at time of observation | |

PRECIPITATION ON STATION AT TIME OF OBSERVATION

Table 8. CLOUD TYPE CODE

Code	Cloud Type	Code	Cloud Type
0	Cirrus Ci	5	Nimbostratus Ns
1	Cirrocumulus Cc	6	Stratocumulus Sc
2	Cirrostratus Cs	7	Stratus St
3	Alto cumulus Ac	8	Cumulus Cu
4	Altostratus As	9	Cumulonimbus Cb
X	Cloud not visible owing to darkness, fog, duststorm, sandstorm, or other analogous phenomena		

Table 9. CLOUD AMOUNT CODE

Code	Cloud Cover	Code	Cloud Cover
0	0	6	6 oktas
1	1 okta or less, but not zero	7	7 oktas or more, but not 8 oktas
2	2 oktas	8	8 oktas
3	3 oktas	9	Sky obscured, or cloud amount cannot be estimated
4	4 oktas		
5	5 oktas		

Note: 1 okta = $\frac{1}{8}$ of the sky covered

Table 10. VISIBILITY

Code	Estimate of hor. Visibility
0	Less than 50 metres (less than 55 yards)
1	50-200 metres (approx. 55-220 yards)
2	200-500 metres (approx. 220-550 yards)
3	500-1,000 metres (approx. 550 yards- $\frac{1}{2}$ n.m.)
4	1-2 km (approx. $\frac{1}{2}$ -1 n.m.)
5	2-4 km (approx. 1-2 n.m.)
6	4-10 km (approx. 2-6 n.m.)
7	10-20 km (approx. 6-12 n.m.)
8	20-50 km (approx. 12-30 n.m.)
9	50 km or more (30 n.m. or more)

Note: n.m. = nautical mile

Table 11

CCO Institute Code

01. Atlantic Oceanographic Group.
02. Pacific Oceanographic Group.
03. Biological Station, St. Andrews, N.B.
04. Arctic Biological Station, St. Anne de Bellevue, P.Q.
05. Biological Station, St. John's, Nfld.
06. Station de Biologie Marine, Grande Riviere, P.Q.
07. Canadian Hydrographic Service.
08. Naval Research Establishment, Dartmouth, N.S.
09. Pacific Naval Laboratory, Esquimalt, B.C.
10. Bedford Institute of Oceanography.
11. Polar Continental Shelf Project.
12. Great Lakes Institute.
13. Inland Region, Oceanographic Research, Ottawa.
14. Institute of Oceanography, Dalhousie University.

SECTION III

Serial oceanographic data

GENERAL INFORMATION

<u>Institute:</u>	Biological Station, St. Andrews, N.B.
<u>Observation platform:</u>	CCGS "Hudson"
<u>Vessel's cruising speed:</u>	14 knots
<u>Total number of stations occupied:</u>	39
<u>Barometer readings</u>	Aneroid Barometer (corrected)
<u>Air temperature</u>	Sling Psychrometer
<u>Wet bulb temperature</u>	Sling Psychrometer
<u>Surface sea water temperature</u>	Bucket sample (deck thermometer)

The following Standard Deviations were used to express both measurement and interpolation error estimates:

Temperature	0.03
Salinity	0.003
Oxygen	0.03

C-REF-NO 001 YR 1965 DEPTH 3282 WAVES 1 2824 AIR T 02.0 VIS 8
 CONS. NO 001 MONTH 2 MXSAMPD 05 WAVES 2 XX WET B 00.0 STN 001
 LAT 36-311N DAY 03 NO.DPTH 7 WND-DIR 290 WW-CODE 02
 LON 73-098W HR 23.9 W-COLOR WND-FCE 05 CLD-TPE 6
 MARSD SQ 116 C/I 1803 W-TRNSP BARU 1028.0 CLD-AMT 5 HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
239	0000	1810 B	36338	492	2629	15184
239	0042	1860	36312	487	2614	15205
239	0092	1588	36072	369	2662	15130
239	0191	1160	35451	314	2703	14998
239	0290	0874	35090	314	2725	14906
239	0390	0678	34921	422	2741	14845
239	0497	0559	34992	484	2762	14816

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1810 B	36338	492	2629	15184	0000	00000	1742
0010	1813 D	3633 B	484 B	2628	15186	0018	00001	1756
0020	1812 H	3632 D	476 D	2627	15187	0035	00004	1765
*0030	1807 I	3631 E	467 E	2627	15187	0053	00008	1767
0050	1827 C	3628 B	470 B	2620	15196	0089	00023	1840
0075	1699 E	3617 B	413 B	2643	15161	0133	00051	1631
0100	1548	3602 B	359	2667	15118	0171	00085	1413
0125	1429	3586 F	334 B	2681	15082	0205	00124	1287
*0150	1320	3570 F	319 C	2692	15049	0237	00168	1189
*0175	1219	3555 D	313 B	2700	15017	0266	00216	1117
0200	1129	35409	311	2706	14988	0293	00269	1061
0225	1049	35301	305	2712	14962	0319	00326	1004
*0250	0975	35209	304	2718	14939	0344	00386	0955
0300	0850	35064	323	2727	14899	0390	00516	0873
0400	0661	34922	402 F	2743	14840	0470	00801	0719
0500	0557	34997	487	2763	14816	0534	01091	0541

C-REF-NO 001	YR 1965	DEPTH 201	WAVES 1 2722	AIR T 03.0	VIS 8
CONS. NO 002	MONTH 2	MXSAMPD 02	WAVES 2 XX	WET B -00.3	STN 002
LAT 34-432N	DAY 04	NO.DPTH 6	WND-DIR 330	WW-CUDE 03	
LON 75-327W	HR 15.0	W-COLOR	WND-FCE 05	CLD-TPE 1	
MARSD SQ 116	C/I 1803	W-TRNSP	BARO 1032.4	CLD-AMT 6	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
150	0000	1900 B	36124	504	2590	15207
150	0017	1949	36111	496	2576	15223
150	0042	1951	36095	492	2574	15228
150	0067	1934	36079	483	2578	15227
150	0092	1593	35948	357	2651	15130
150	0174	1097	35295	311	2703	14971

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1900 B	36124	504	2590	15207	0000	00000	2113
0010	1927 B	36117	500	2582	15216	0022	00001	2187
0020	1952	36109	495	2575	15224	0044	00005	2259
0030	1956	36102	494	2573	15227	0067	00010	2279
0050	1964 D	3610 B	496 B	2571	15233	0113	00029	2310
0075	1838 E	36045	446 B	2600	15201	0168	00064	2046
0100	1674 I	3593 F	398 I	2631	15155	0216	00107	1754
0125	1507 I	3577 F	364 I	2657	15106	0257	00154	1514
*0150	1311 I	3556 D	335 G	2682	15044	0292	00203	1281
*0175	1087	35283	310	2704	14968	0322	00252	1073

C-REF-NO 001	YR 1965	DEPTH 2733	WAVES 1 0920	AIR T 12.4	VIS 8
CONS. NO 003	MONTH 2	MXSAMPD 05	WAVES 2 0621	WET B 07.2	STN 005
LAT 34-103N	DAY 05	NO.DPTH 7	WND-DIR 110	WW-CODE 02	
LON 75-343W	HR 17.5	W-COLOR	WND-FCE 01	CLD-TPE 8	
MARSD SQ 116	C/I 1803	W-TRNSP	BARO 1032.6	CLD-AMT 1	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
175	0000	2370 B	36309	474	2474	15332
175	0042	2419	36253	467	2455	15350
175	0092	2413	36292	462	2460	15357
175	0192	1995	36618	350	2603	15271
175	0292	1733	36320	371	2646	15209
175	0392	1530	35976	357	2667	15160
175	0500	1135	35394	306	2704	15039

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	2370 B	36309	474	2474	15332	0000	00000	3214
0010	2391 B	36291	475	2466	15339	0033	00002	3291
0020	2408 B	36277	475	2460	15344	0066	00007	3353
*0030	2421 B	36266	475	2456	15349	0100	00016	3400
0050	2425	36253	467	2453	15353	0169	00044	3430
0075	2427	36268	465	2454	15357	0255	00099	3434
0100	2387 C	3632 D	453	2470	15353	0339	00175	3290
0125	2296 I	3642 I	425 C	2504	15336	0418	00265	2981
*0150	2194 I	3650 I	397 D	2539	15315	0489	00364	2652
*0175	2080 F	3657 H	369 B	2576	15290	0552	00468	2306
0200	1970	3661 C	350	2608	15265	0606	00572	2010
0225	1897	3656 G	352 B	2624	15248	0655	00678	1872
*0250	1830 B	3649 H	356 B	2635	15232	0701	00790	1770
0300	1719	36297	371	2648	15206	0787	01033	1660
0400	1468 H	3592 E	355	2676	15141	0942	01583	1410
0500	1135	35394	306	2704	15039	1072	02174	1155

C-REF-NO 001 YR 1965 DEPTH 4535 WAVES 1 2020 AIR T 14.4 VIS 8
 CONS. NO 004 MONTH 2 MXSAMPD 05 WAVES 2 0621 WET B 09.9 STN 006
 LAT 32-420N DAY 06 NO.DPTH 7 WND-DIR 200 WW-CODE 02
 LON 74-170W HR 06.9 W-COLOR WND-FCE 03 CLD-TPE
 MARSD SQ 116 C/I 1803 W-TRNSP BARO 1029.6 CLD-AMT 0 HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
069	0000	2020 B	36564	500	2592	15245
069	0042	1976	36570	494	2604	15240
069	0092	1930	36566	497	2616	15236
069	0192	1926	36564	490	2617	15251
069	0292	1826	36513	452	2638	15239
069	0392	1788	36483	463	2645	15244
069	0500	1743	36418	461	2652	15248

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	2020 B	36564	500	2592	15245	0000	00000	2093
0010	2007 B	36565	499	2595	15243	0021	00001	2064
0020	1995	36566	498	2599	15242	0042	00004	2037
*0030	1984	36567	497	2602	15240	0062	00009	2012
0050	1967	36570	494	2606	15239	0102	00026	1975
0075	1944	36568	496	2612	15237	0151	00057	1926
0100	1929	36567	497	2616	15237	0199	00101	1901
0125	1928 C	36568	497	2617	15240	0247	00156	1905
*0150	1926 C	36567	496	2617	15244	0295	00224	1911
*0175	1926 B	36566	493	2617	15248	0344	00304	1920
0200	1919	36560	487	2618	15250	0392	00397	1915
0225	1895 B	36549	476	2623	15247	0440	00501	1874
*0250	1870 B	36536	467	2629	15244	0486	00615	1831
0300	1822	36511	452	2639	15239	0577	00869	1750
0400	1773 C	3647 B	452 B	2648	15240	0750	01492	1696
0500	1743	36418	461	2652	15248	0921	02284	1697

C-REF-NO 001	YR 1965	DEPTH 5157	WAVES 1 1322	AIR T 18.5	VIS 8
CONS. NO 005	MONTH 2	MXSAMPD 05	WAVES 2 XX	WET B 16.0	STN 007
LAT 31-210N	DAY 06	NO.DPTH 7	WND-DIR 130	WW-CODE 01	
LON 73-125W	HR 16.5	W-COLOR	WND-FCE 05	CLD-TPE 4	
MARSD SQ 116	C/I 1803	W-TRNSP	BARO 1030.9	CLD-AMT 7	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
165	0000	2085 B	36683	495	2583	15264
165	0042	2124	36611	491	2567	15280
165	0092	2052	36614	495	2587	15269
165	0192	1861	36541	447	2632	15232
165	0292	1896	36472	450	2617	15258
165	0392	1767	36435	457	2647	15237
165	0500	1688	36302	435	2656	15230

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	2085 B	36683	495	2583	15264	0000	00000	2174
0010	2093 B	3667 B	496	2580	15268	0022	00001	2209
0020	2100 C	3666 C	496	2577	15271	0044	00005	2238
*0030	2104 C	3665 D	496	2575	15273	0067	00010	2261
0050	2117	36609	492	2569	15280	0113	00029	2331
0075	2085 B	3661 B	494	2578	15275	0171	00066	2255
0100	2034 B	36610	492	2592	15266	0226	00116	2132
0125	1980 D	3660 B	480 B	2605	15255	0278	00176	2016
*0150	1931 D	3658 B	469 B	2616	15246	0328	00245	1916
*0175	1888 B	36557	456	2626	15237	0375	00324	1832
0200	1863 B	36535	446	2631	15234	0421	00412	1796
0225	1869 E	36516	445	2628	15240	0467	00512	1834
*0250	1878 E	36499	445	2624	15246	0513	00626	1876
0300	1888	36470	451	2619	15257	0609	00898	1940
0400	1799 H	3641 D	451	2637	15247	0798	01572	1803
0500	1688	36302	435	2656	15230	0972	02374	1651

C-REF-NO 001	YR 1965	DEPTH 5230	WAVES 1 1222	AIR T 18.2	VIS 8
CONS. NO 006	MONTH 2	MXSAMPD 07	WAVES 2 XX	WET B 14.0	STN 008
LAT 29-581N	DAY 07	NO.DPTH 8	WND-DIR 120	WW-CODE 03	
LON 72-050W	HR 02.0	W-COLOR	WND-FCE 05	CLD-TPE 3	
MARSD SQ 080	C/I 1803	W-TRNSP	BARO 1029.8	CLD-AMT 2	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
020	0000	2100 B	36651	494	2577	15267
020	0042	2119	36614	492	2569	15279
020	0092	2118	36614	491	2569	15287
020	0191	1908	36564	445	2621	15246
020	0290	1805	36496	455	2642	15232
020	0390	1781	36445	458	2644	15241
020	0489	1708	36347	447	2655	15235
020	0695	1351	35739	356	2688	15149

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	2100 B	36651	494	2577	15267	0000	00000	2236
0010	2110 B	36644	495	2574	15272	0023	00001	2270
0020	2117 B	36638	495	2571	15275	0046	00005	2298
*0030	2123 B	3663 B	495	2569	15278	0069	00011	2321
0050	2122	36613	492	2568	15281	0116	00030	2340
0075	2124	36612	492	2567	15286	0175	00068	2355
0100	2104 B	36612	487	2573	15285	0234	00121	2314
0125	2057 E	36602	476 B	2585	15276	0291	00186	2208
*0150	2005 E	36590	464 B	2598	15266	0345	00262	2093
*0175	1948 C	36575	453	2612	15254	0396	00347	1968
0200	1895	36558	445	2624	15243	0444	00440	1858
0225	1862	36541	446	2631	15238	0490	00540	1800
*0250	1835	36524	448	2637	15234	0535	00649	1756
0300	1802	36492	456	2643	15233	0622	00896	1716
0400	1776	36439	458	2645	15241	0796	01520	1727
0500	1692	3631 E	442	2655	15231	0967	02308	1657
0600	1545	3606 C	407	2671	15200	1128	03214	1532
*0700	1339	35720	353	2689	15146	1274	04189	1369

C-REF-NO 001	YR 1965	DEPTH 5266	WAVES 1 1122	AIR T 19.7	VIS 8
CONS. NO 007	MONTH 2	MXSAMPD 05	WAVES 2 XX	WET B 14.7	STN 009
LAT 28-330N	DAY 07	NO.DPTH 7	WND-DIR 110	WW-CODE 03	
LON 71-065W	HR 11.6	W-COLOR	WND-FCE 05	CLD-TPE 8	
MARSD SQ 080	C/I 1803	W-TRNSP	BARO 1029.4	CLD-AMT 6	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
116	0000	2150 B	36745	501	2570	15282
116	0042	2150	36699	496	2567	15288
116	0092	2150	36699	495	2567	15296
116	0192	1935	36598	500	2617	15254
116	0292	1812	36498	463	2641	15234
116	0392	1774	36462	463	2647	15239
116	0500	1687	36294	433	2656	15229

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	2150 B	36745	501	2570	15282	0000	00000	2299
0010	2156 B	36738	500	2568	15285	0023	00001	2323
0020	2160 B	3673 B	499	2566	15287	0047	00005	2343
*0030	2162 B	3672 C	498	2565	15289	0070	00011	2358
0050	2152	36698	496	2566	15290	0118	00030	2359
0075	2154	36698	495	2565	15294	0177	00069	2373
0100	2136 B	36693	496	2570	15294	0237	00122	2339
0125	2090 E	3667 B	498	2581	15286	0294	00188	2241
*0150	2037 E	3665 B	500	2594	15275	0349	00266	2132
*0175	1978 C	36620	500	2607	15263	0402	00352	2013
0200	1922	36589	497	2620	15251	0451	00447	1903
0225	1885	36561	488	2627	15245	0498	00550	1839
*0250	1853	36536	479	2633	15240	0544	00661	1789
0300	1808	36496	463	2641	15234	0632	00911	1728
0400	1746 E	3642 G	450 C	2651	15232	0804	01525	1668
0500	1687	36294	433	2656	15229	0971	02299	1655

C-REF-NO 001	YR 1965	DEPTH 5321	WAVES 1 0923	AIR T 21.5	VIS 8
CONS. NO 008	MONTH 2	MXSAMPD 05	WAVES 2 XX	WET B 17.2	STN 010
LAT 27-110N	DAY 07	NO.DPTH 7	WND-DIR 090	WW-CODE 03	
LON 70-000W	HR 20.6	W-COLOR	WND-FCE 06	CLD-TPE 8	
MARSD SQ 080	C/I 1803	W-TRNSP	BARO 1027.9	CLD-AMT 5	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
206	0000	2260 B	36772	498	2541	15310
206	0042	2288	36722	493	2529	15323
206	0092	2285	36715	490	2530	15331
206	0192	2029	36635	449	2595	15280
206	0292	1781	36406	439	2641	15224
206	0392	1679	36263	424	2655	15209
206	0500	1545	36043	396	2669	15183

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	2260 B	36772	498	2541	15310	0000	00000	2575
0010	2273 B	36763	498	2537	15315	0026	00001	2620
0020	2283	3675 B	497	2533	15319	0053	00005	2658
*0030	2290 B	3675 B	497	2530	15322	0080	00012	2689
0050	2292	36720	493	2528	15326	0134	00035	2720
0075	2293	36715	491	2527	15330	0203	00079	2736
0100	2271 B	36713	487	2534	15328	0271	00140	2686
0125	2219 D	36702	477	2548	15319	0337	00216	2562
*0150	2156 E	36683	467	2564	15307	0400	00304	2419
*0175	2084 C	36657	457	2582	15292	0458	00402	2257
0200	2006	36618	448	2600	15275	0513	00507	2094
0225	1939 B	3656 C	444	2613	15260	0564	00618	1972
*0250	1876 B	3651 C	442	2625	15246	0613	00736	1867
0300	1771	36394	438	2643	15222	0703	00990	1712
0400	1640 F	3622 E	421	2661	15198	0868	01579	1565
0500	1545	36043	396	2669	15183	1023	02296	1515

C-REF-NO 001	YR 1965	DEPTH 5000	WAVES 1 1124	AIR T 20.7	VIS 8
CONS. NO 009	MONTH 2	MXSAMPD 07	WAVES 2 XX	WET B 15.7	STN 011
LAT 25-490N	DAY 08	NO.DPTH 8	WND-DIR 110	WW-CODE 02	
LON 68-540W	HR 06.1	W-COLOR	WND-FCE 05	CLD-TPE 8	
MARSD SQ 079	C/I 1803	W-TRNSP	BARO 1026.1	CLD-AMT 5	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
061	0000	2350 B	36751	490	2513	15332
061	0042	2383	36698	489	2500	15346
061	0092	2361	36767	479	2511	15350
061	0192	1934	36598	455	2617	15254
061	0292	1823	36502	463	2638	15238
061	0392	1752	36413	451	2649	15232
061	0492	1614	36159	410	2662	15204
061	0700	1175	35498	336	2704	15087

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	2350 B	36751	490	2513	15332	0000	00000	2839
0010	2367 B	3675 C	490	2508	15338	0029	00001	2892
0020	2380 B	3675 E	489	2504	15343	0058	00006	2934
*0030	2388 B	3674 G	489	2501	15346	0088	00014	2965
0050	2386	3671 B	488	2500	15349	0148	00038	2992
0075	2379	3674 C	483	2504	15351	0223	00086	2959
0100	2330 D	3676 B	477	2520	15344	0295	00151	2818
0125	2231 I	3673 F	470	2546	15323	0363	00229	2576
*0150	2125 I	3669 G	463	2573	15299	0425	00316	2332
*0175	2013 G	3664 D	458	2599	15273	0480	00408	2088
0200	1919	36589	455	2620	15250	0531	00504	1894
0225	1878 C	36562	457	2629	15243	0577	00606	1822
*0250	1848 D	36537	459	2635	15238	0623	00716	1776
0300	1818	36498	463	2639	15237	0712	00967	1749
0400	1743	36396	448	2650	15231	0884	01586	1679
0500	1606	3617 G	416 B	2665	15203	1048	02338	1559
0600	1418	3588 E	380 B	2684	15157	1197	03175	1390
0700	1175	35498	336	2704	15087	1328	04045	1204

C-REF-NO 001	YR 1965	DEPTH 5467	WAVES 1 0824	AIR T 23.0	VIS 8
CONS. NO 010	MUNTH 2	MXSAMPD 05	WAVES 2 XX	WET B 17.7	STN 012
LAT 24-265N	DAY 08	NO.DPTH 7	WND-DIR 070	WW-CODE 01	
LON 67-510W	HR 15.6	W-COLOR	WND-FCE 05	CLD-TPE 8	
MARSD SQ 079	C/I 1803	W-TRNSP	BARO 1025.2	CLD-AMT 3	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
156	0000	2390 B	36716	485	2499	15341
156	0042	2408	36670	483	2490	15352
156	0092	2400	36680	479	2493	15359
156	0192	2042	36651	452	2593	15284
156	0292	1846	36519	462	2634	15244
156	0392	1777	36384	465	2641	15239
156	0500	1656	36219	427	2657	15219

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	2390 B	36716	485	2499	15341	0000	00000	2977
0010	2403 B	36708	485	2494	15346	0030	00002	3024
0020	2412 B	3670 B	485	2491	15350	0061	00006	3060
*0030	2419 B	3669 C	484	2489	15353	0092	00014	3087
0050	2412	36670	483	2489	15354	0154	00040	3092
0075	2411	36674	481	2490	15358	0232	00090	3097
0100	2377 C	36681	477	2500	15354	0308	00158	3005
0125	2298 H	36680	469	2523	15339	0381	00242	2796
*0150	2210 H	36673	463	2548	15321	0449	00337	2570
*0175	2113 E	36662	456	2574	15300	0510	00439	2330
0200	2021	36642	452	2598	15279	0566	00546	2114
0225	1961	36613	454	2611	15267	0618	00659	1993
*0250	1911	3658 B	456	2622	15256	0667	00778	1899
0300	1839	36509	463	2635	15243	0760	01040	1793
0400	1739 F	36370	458	2649	15229	0936	01668	1689
0500	1656	36219	427	2657	15219	1104	02442	1637

C-REF-NO 001 YR 1965 DEPTH 5668 WAVES 1 0724 AIR I 22.3 VIS 8
 CONS. NO 011 MONTH 2 MXSAMPD 07 WAVES 2 XX WET B 19.5 STN 013
 LAT 23-070N DAY 09 NO.DPTH 8 WND-DIR 050 WW-CODE 01
 LON 66-470W HR 01.6 W-COLOR WND-FCE 05 CLD-TPE 8
 MARSD SQ 079 C/I 1803 W-TRNSP BARO 1022.1 CLD-AMT 1 HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
116	0000	2440 B	36495	483	2467	15351
116	0042	2466	36468	480	2457	15364
116	0092	2466	36492	477	2459	15372
116	0192	2101	36816	432	2589	15301
116	0292	1827	36511	460	2638	15239
116	0392	1711	36336	447	2653	15219
116	0492	1521	36017	403	2673	15174
116	0700	1047	35338	323	2715	15040

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	2440 B	36495	483	2467	15351	0000	00000	3278
0010	2455 B	36482	483	2462	15356	0033	00002	3336
0020	2467 B	36473	483	2457	15360	0067	00007	3381
*0030	2475 C	36466	483	2454	15364	0101	00016	3413
0050	2471	36467	480	2456	15366	0170	00044	3409
0075	2475	36475	479	2455	15371	0256	00099	3423
0100	2444 C	3652 D	473	2468	15369	0340	00175	3311
0125	2367 G	3661 I	461 B	2498	15355	0420	00266	3038
*0150	2278 H	3670 I	450 B	2530	15338	0493	00368	2740
*0175	2177 E	3677 H	439	2565	15318	0558	00476	2421
0200	2074	3680 C	434	2595	15295	0615	00586	2138
0225	1997	3674 I	439 B	2612	15278	0667	00699	1989
*0250	1927	3667 I	446 B	2624	15262	0716	00817	1875
0300	1816	36497	460	2640	15237	0807	01074	1746
0400	1698	36313	444	2654	15216	0977	01683	1633
0500	1518 C	3603 H	409 B	2674	15174	1134	02401	1466
0600	1304 B	3571 F	371 B	2695	15117	1272	03178	1276
0700	1047	35338	323	2715	15040	1391	03968	1083

C-REF-NO 001	YR 1965	DEPTH 5000	WAVES 1 0524	AIR 1 22.7	VIS 8
CONS. NO 012	MONTH 2	MXSAMPD 05	WAVES 2 XX	WET B 17.2	STN 014
LAT 21-410N	DAY 09	NO.DPTH 7	WND-DIR 040	WW-CODE 02	
LON 65-477W	HR 12.8	W-COLOR	WND-FCE 05	CLD-TPE 2	
MARSD SQ 079	C/I 1803	W-TRNSP	BARO 1020.0	CLD-AMT 4	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
128	0000	2440 B	36467	479	2465	15351
128	0042	2463	36439	476	2456	15363
128	0092	2399	36871	481	2508	15360
128	0192	1990	36735	428	2613	15271
128	0292	1794	36472	468	2643	15229
128	0392	1622	36179	391	2662	15191
128	0500	1383	35832	367	2688	15129

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	2440 B	36467	479	2465	15351	0000	00000	3298
0010	2451 B	3650 I	480	2464	15355	0033	00002	3314
0020	2459	3652 I	481	2464	15359	0067	00007	3321
*0030	2463	3655 I	481	2464	15362	0100	00015	3317
0050	2459	3650 F	477	2462	15364	0167	00043	3349
0075	2432	3671 I	480	2486	15364	0248	00095	3127
0100	2369 C	3689 E	477	2518	15355	0323	00161	2836
0125	2273 G	3691 I	463 B	2548	15335	0391	00239	2563
*0150	2172 H	3688 I	450 C	2574	15313	0453	00325	2317
*0175	2065 E	3681 I	437 B	2598	15289	0508	00418	2098
0200	1970	36717	432	2617	15266	0559	00515	1930
0225	1912 B	36657	443 C	2627	15254	0606	00618	1839
*0250	1862 C	3659 B	453 C	2635	15243	0652	00729	1771
0300	1781	36450	463	2645	15226	0739	00975	1695
0400	1593 C	36155	418 F	2667	15183	0901	01551	1509
0500	1383	35832	367	2688	15129	1044	02206	1322

C-REF-NO 001	YR 1965	DEPTH 5198	WAVES 1 0623	AIR T 24.3	VIS 8
CONS. NO 013	MONTH 2	MXSAMPD 07	WAVES 2 XX	WET B 18.7	STN 015
LAT 20-217N	DAY 09	NO.DPTH 8	WND-DIR 060	WW-CODE 01	
LON 64-430W	HR 22.0	W-COLOR	WND-FCE 05	CLD-TPE 8	
MARSD SQ 079	C/I 1803	W-TRNSP	BARO 1017.4	CLD-AMT 2	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
220	0000	2460 B	36439	484	2457	15355
220	0042	2466	36425	477	2454	15363
220	0092	2453	36472	478	2462	15369
220	0192	2031	36810	477	2608	15283
220	0292	1768	36426	431	2646	15221
220	0392	1591	36130	390	2665	15181
220	0492	1384	35793	359	2685	15127
220	0700	0920	35125	305	2720	14991

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	2460 B	36439	484	2457	15355	0000	00000	3376
0010	2472 B	36430	483	2453	15359	0034	00002	3420
0020	2480 C	36425	481	2450	15363	0069	00007	3451
*0030	2484 C	36422	480	2448	15365	0103	00016	3470
0050	2469	36427	477	2453	15365	0173	00044	3431
0075	2466 B	36448	477	2456	15369	0259	00099	3418
0100	2426 C	3651 D	479	2472	15364	0343	00175	3271
0125	2334 H	3661 I	480	2507	15347	0421	00264	2950
*0150	2231 I	3669 I	480	2543	15326	0491	00362	2612
*0175	2116 E	3677 H	479	2581	15302	0553	00464	2261
0200	2005	3679 C	474	2613	15277	0606	00566	1967
0225	1931	3672 I	464	2627	15259	0654	00670	1840
*0250	1864	3663 I	453	2637	15244	0699	00780	1750
0300	1753	36401	427	2648	15217	0785	01022	1664
0400	1575	36104	387	2667	15177	0945	01593	1506
0500	1372	3578 C	355	2687	15124	1088	02251	1337
0600	1155	3546 B	327	2705	15063	1215	02963	1171
0700	0920	35125	305	2720	14991	1326	03697	1018

C-REF-NO 001	YR 1965	DEPTH 2596	WAVES 1 0623	AIR T 22.1	VIS 8
CUNS. NO 014	MONTH 2	MXSAMPD 05	WAVES 2 XX	WET B 19.4	STN 016
LAT 18-570N	DAY 10	NO.DPTH 7	WND-DIR 060	WW-CODE 02	
LUN 63-525W	HR 07.4	W-COLOR	WND-FCE 05	CLD-FPE 8	
MARSD SQ 043	C/I 1803	W-TRNSP	BARO 1015.2	CLD-AMT 2	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
074	0000	2460 B	36253	476	2443	15353
074	0042	2474	36206	472	2435	15363
074	0092	2580	36833	467	2450	15403
074	0192	2051	36850	406	2605	15288
074	0292	1737	36371	407	2649	15211
074	0392	1459	35869	321	2675	15136
074	0500	1338	35548	306	2676	15110

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	PUT.EN	SVA
0000	2460 B	36253	476	2443	15353	0000	00000	3510
0010	2485 D	3629 I	476	2438	15361	0036	00002	3561
0020	2505 G	3632 I	476	2435	15367	0072	00007	3598
*0030	2519 I	3636 I	476	2433	15373	0108	00017	3621
0050	2496 C	3630 I	472	2435	15370	0180	00046	3604
0075	2552 D	3660 I	470	2441	15391	0270	00104	3560
0100	2552 E	3687 E	462	2462	15398	0358	00182	3373
0125	2448 I	3696 I	447 B	2500	15379	0438	00274	3020
*0150	2320 I	3697 I	432 B	2539	15352	0509	00374	2656
*0175	2168 I	3692 I	417	2579	15317	0572	00477	2287
0200	2021	3682 B	407	2611	15281	0625	00580	1985
0225	1934 B	3672 F	408 B	2627	15260	0674	00685	1845
*0250	1854 C	3660 F	408 B	2638	15241	0719	00795	1742
0300	1711	36328	400	2652	15204	0804	01033	1620
0400	1466 E	3588 H	346 F	2674	15140	0958	01582	1434
0500	1338	35548	306	2676	15110	1102	02251	1436

C-REF-NO 001	YR 1965	DEPTH 33	WAVES 1 06X1	AIR T 25.7	VIS 8
CONS. NO 015	MONTH 2	MXSAMPD 00	WAVES 2 XX	WET B 20.2	STN 017
LAT 17-280N	DAY 10	NU.DPTH 1	WND-DIR 060	WW-CODE 02	
LON 63-300W	HR 16.9	W-COLOR	WND-FCE 03	CLD-TPE 8	
MARSD SQ 043	C/I 1803	W-TRNSP	BARO 1015.2	CLD-AMT 2	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
169	0000	2510 B	35996		2408	15362

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	2510 B	35996		2408	15362	0000	00000	3840

C-REF-NO 001	YR 1965	DEPTH	29	WAVES 1	XX	AIR T	25.0	VIS	8
CONS. NO 016	MONTH 2	MXSAMPD	00	WAVES 2	XX	WET B	20.5	STN	018
LAT 17-230N	DAY 11	NO.DPTH	1	WND-DIR	050	WW-CODE	01		
LON 63-370W	HR 17.6	W-COLOR		WND-FCE	04	CLD-TPE	8		
MARSD SQ 043	C/I 1803	W-TRNSP		BARO	1018.0	CLD-AMT	2	HW	

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
176	0000	2540 B	35958		2396	15368

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	2540 B	35958		2396	15368	0000	00000	3955

C-REF-NO 001	YR 1965	DEPTH 732	WAVES 1 0421	AIR T 25.0	VIS 8
CONS. NO 017	MONTH 2	MXSAMPD 06	WAVES 2 XX	WET B 20.0	STN 019
LAT 17-115N	DAY 11	NO.DPTH 8	WND-DIR 040	WW-CODE 03	
LON 63-385W	HR 21.2	W-COLOR	WND-FCE 04	CLD-TPE 8	
MARSD SQ 043	C/I 1803	W-TRNSP	BARO 1016.1	CLD-AMT 5	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
212	0000	2555 B	35862	474	2384	15371
212	0042	2564	35824	472	2379	15379
212	0092	2588	36703	469	2438	15403
212	0192	1974	36709	373	2615	15266
212	0292	1580	36023	323	2660	15159
212	0392	1295	35586	313	2687	15079
212	0492	1071	35244	296	2704	15013
212	0650	0780	34878	293	2723	14927

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	2555 B	35862	474	2384	15371	0000	00000	4068
0010	2575 C	3592 I	476	2382	15378	0041	00002	4092
0020	2590 E	3597 I	477	2382	15383	0082	00008	4101
*0030	2599 G	3602 I	477	2383	15388	0123	00019	4095
0050	2575 B	3595 I	473	2385	15385	0205	00053	4084
0075	2591 C	3638 I	472	2412	15397	0305	00116	3834
0100	2551 E	3676 G	463	2453	15396	0396	00197	3453
0125	2422 I	3687 I	441 B	2501	15371	0478	00290	3006
*0150	2272 I	3689 I	418 B	2547	15339	0548	00389	2583
*0175	2102 I	3682 I	392 B	2589	15299	0608	00488	2189
0200	1936	3666 D	367	2621	15256	0659	00586	1886
0225	1826 B	3651 I	352	2638	15227	0705	00685	1736
*0250	1725 B	3634 I	339	2650	15200	0747	00788	1629
0300	1554	35982	322	2662	15152	0827	01011	1517
0400	1275	35555	312	2689	15073	0968	01512	1279
0500	1047 B	35218	300	2706	15006	1089	02069	1126
0600	0858	34969	294	2718	14950	1197	02676	1012

C-REF-NO 001	YR 1965	DEPTH 1536	WAVES 1 0722	AIR T 25.0	VIS 8
CONS. NO 018	MONTH 2	MXSAMPD 07	WAVES 2 XX	WET B 20.6	STN 020
LAT 15-395N	DAY 12	NO.DPTH 8	WND-DIR 060	WW-CODE 02	
LON 63-440W	HR 13.5	W-COLOR	WND-FCE 05	CLD-TPE 0	
MARSD SQ 043	C/I 1803	W-TRNSP	BARO 1017.6	CLD-AMT 2	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
135	0000	2520 B	36008	474	2406	15364
135	0041	2536	36001	472	2401	15375
135	0090	2555	36799	463	2455	15396
135	0189	1922	36655	372	2625	15250
135	0287	1472	35866	326	2672	15123
135	0386	1144	35304	290	2695	15022
135	0484	0964	35080	293	2709	14971
135	0690	0637	34722	311	2731	14876

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	2520 B	36008	474	2406	15364	0000	00000	3860
0010	2542 C	3607 I	475	2404	15372	0039	00002	3885
0020	2558 E	3613 I	476	2403	15378	0078	00008	3894
*0030	2568 F	3618 I	476	2405	15382	0117	00018	3889
0050	2548 B	3614 I	472	2407	15380	0195	00050	3870
0075	2561 C	3654 I	467	2434	15392	0289	00110	3630
0100	2507 F	3685 I	455	2474	15387	0376	00187	3257
0125	2372 I	3692 I	434 B	2520	15360	0452	00274	2831
*0150	2214 I	3689 I	411 B	2563	15325	0519	00367	2424
*0175	2033 G	3677 I	386	2604	15280	0575	00460	2046
0200	1864	3658 E	365	2634	15235	0623	00552	1769
0225	1739	3639 I	352	2650	15201	0665	00645	1616
*0250	1624	3619 I	340	2662	15168	0705	00740	1507
0300	1421	35776	320	2676	15107	0778	00945	1384
0400	1113	3526 B	289	2697	15013	0908	01406	1189
0500	0898 G	3496 I	284 B	2711	14948	1021	01929	1064
0600	0731 E	3477 I	290 B	2721	14898	1124	02505	0965
*0700	0630	3472 B	314	2732	14874	1216	03121	0867

C-REF-NO 001	YR 1965	DEPTH 1536	WAVES 1 07X2	AIR T 24.4	VIS 8
CONS. NO 019	MONTH 2	MXSAMPD 00	WAVES 2 XX	WET B 21.5	STN 021
LAT 15-400N	DAY 13	NO.DPTH 1	WND-DIR 060	WW-CODE 03	
LON 63-450W	HR 15.7	W-COLOR	WND-FCE 05	CLD-TPE 9	
MARSD SQ 043	C/I 1803	W-TRNSP	BARO 1016.0	CLD-AMT 6	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
157	0000	2550 B	35873		2387	15370

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	2550 B	35873		2387	15370	0000	00000	4046

C-REF-NO 001	YR 1965	DEPTH 1152	WAVES 1 0824	AIR T 24.0	VIS 8
CONS. NO 020	MONTH 2	MXSAMPD 07	WAVES 2 XX	WET B 20.3	STN 022
LAT 16-360N	DAY 14	NO.DPTH 8	WND-DIR 080	WW-CODE 00	
LON 61-577W	HR 03.3	W-COLOR	WND-FCE 05	CLD-TPE 8	
MARSD SQ 043	C/I 1803	W-TRNSP	BARO 1017.0	CLD-AMT 4	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
033	0000	2530 B	35808	474	2388	15364
033	0042	2564	36248	472	2411	15384
033	0092	2535	36525	473	2441	15389
033	0192	2067	36857	392	2602	15293
033	0292	1682	36215	376	2651	15193
033	0392	1391	35812	362	2685	15113
033	0492	1033	35203	284	2707	14999
033	0700	0662	34741	302	2729	14887

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	2530 B	35808	474	2388	15364	0000	00000	4034
0010	2548 B	3591 B	476	2391	15371	0040	00002	4014
0020	2561 B	3602 D	477	2394	15377	0081	00008	3984
*0030	2570 B	3611 E	477	2399	15382	0120	00018	3946
0050	2566	3630 B	473	2414	15387	0198	00050	3805
0075	2557	3645 C	474	2428	15390	0292	00110	3681
0100	2506 C	3658 C	467	2453	15384	0382	00190	3453
0125	2406 H	3671 H	449 B	2493	15366	0464	00284	3082
*0150	2292 I	3680 I	429 C	2534	15343	0537	00386	2706
*0175	2163 E	3685 E	407 B	2574	15315	0600	00491	2329
0200	2033	3682 E	389	2608	15284	0655	00596	2017
0225	1930	3669 I	383	2625	15259	0704	00702	1862
*0250	1833	3653 I	379	2638	15234	0749	00812	1746
0300	1658	3618 B	376	2654	15186	0834	01050	1604
0400	1361	3576 B	356	2687	15104	0980	01568	1300
0500	1060 I	3529 I	313 G	2709	15011	1101	02121	1095
0600	0836 H	3497 I	302 E	2722	14941	1206	02708	0973
0700	0662	34741	302	2729	14887	1300	03338	0900

C-REF-NO 001 YR 1965 DEPTH 3840 WAVES 1 0922 AIR T 24.1 VIS 8
 CONS. NO 021 MONTH 2 MXSAMPD 07 WAVES 2 XX WET B 20.0 STN 023
 LAT 18-115N DAY 14 NO.DPTH 8 WND-DIR 070 WW-CODE 00
 LON 62-245W HR 12.3 W-COLOR WND-FCE 05 CLD-TPE 3
 MARSD SQ 043 C/I 1803 W-TRNSP BARO 1019.2 CLD-AMT 6 HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
123	0000	2480 B	36359	475	2445	15359
123	0042	2501	36326	471	2436	15370
123	0092	2493	36525	475	2453	15379
123	0192	2099	36884	396	2595	15302
123	0292	1646	36221	383	2660	15182
123	0392	1349	35685	322	2684	15098
123	0492	1166	35423	310	2700	15049
123	0700	0762	34894	296	2727	14929

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	2480 B	36359	475	2445	15359	0000	00000	3491
0010	2495 B	3636 C	477	2440	15364	0035	00002	3539
0020	2505 B	3636 E	477	2437	15368	0071	00007	3574
*0030	2512 C	3636 H	478	2435	15371	0107	00017	3596
0050	2505	3635 B	472	2437	15373	0179	00046	3592
0075	2505	3644 C	475	2444	15378	0269	00103	3533
0100	2472 B	3657 D	470	2464	15376	0355	00181	3354
0125	2394 F	3670 I	452 B	2497	15363	0436	00273	3049
*0150	2299 F	3680 I	432 C	2532	15345	0509	00375	2722
*0175	2186 D	3686 H	411 B	2569	15321	0573	00481	2379
0200	2061	3685 E	395	2602	15292	0629	00588	2069
0225	1944 C	3672 I	391 B	2623	15263	0678	00696	1876
*0250	1830 C	3655 I	387 B	2640	15233	0724	00806	1722
0300	1617	36171	378	2662	15174	0805	01036	1520
0400	1332	35659	320	2685	15093	0949	01544	1316
0500	1118 G	3533 I	297 C	2702	15032	1074	02121	1172
0600	0921 E	3506 I	286 B	2715	14974	1186	02751	1048
0700	0762	34894	296	2727	14928	1286	03417	0934

C-REF-NO 001	YR 1965	DEPTH 1372	WAVES 1 06X2	AIR T 25.1	VIS 8
CONS. NU 022	MONTH 2	MXSAMPD 00	WAVES 2 XX	WET B 21.5	STN 024
LAT 18-097N	DAY 14	NO.DPTH 1	WND-DIR 060	WW-CODE 02	
LON 64-463W	HR 23.2	W-COLOR	WND-FCE 04	CLD-TPE 8	
MARSD SQ 043	C/I 1803	W-TRNSP	BARO 1018.0	CLD-AMT 4	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
232	0000	2480 B	36187		2432	15357

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	2480 B	36187		2432	15357	0000	00000	3615

C-REF-NO 001 YR 1965 DEPTH 1317 WAVES 1 0822 AIR T 24.5 VIS 8
 CONS. NO 023 MONTH 2 MXSAMPD 07 WAVES 2 XX WET B 21.7 STN 025
 LAT 18-350N DAY 15 NO.DPTH 8 WND-DIR 070 WW-CODE 03
 LON 66-040W HR 13.7 W-COLOR WND-FCE 05 CLD-TPE 8
 MARSD SQ 043 C/I 1803 W-TRNSP BARO 1020.2 CLD-AMT 6 HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
137	0000	2470 B	36440	480	2454	15357
137	0042	2479	36444	473	2452	15366
137	0092	2504	36404	474	2441	15380
137	0191	2038	36837	414	2608	15285
137	0290	1744	36804	440	2681	15218
137	0390	1567	36093	392	2668	15172
137	0489	1325	35706	340	2691	15106
137	0695	0914	35138	312	2722	14988

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	2470 B	36440	480	2454	15357	0000	00000	3404
0010	2486 C	3643 B	480	2448	15363	0035	00002	3466
0020	2499 D	3642 D	480	2444	15367	0070	00007	3512
*0030	2506 E	3641 F	479	2441	15371	0105	00016	3544
0050	2488 B	3643 B	474	2448	15370	0176	00045	3483
0075	2504 C	3641 C	474	2441	15377	0264	00102	3556
0100	2476 D	3644 E	469	2452	15375	0352	00181	3466
0125	2377 I	3654 I	454 B	2489	15357	0435	00276	3120
*0150	2262 I	3665 I	439 B	2531	15334	0509	00379	2732
*0175	2131 G	3676 I	424 B	2577	15306	0572	00484	2305
0200	2005	36857	416	2618	15277	0625	00585	1918
0225	1921	3689 C	422 B	2643	15259	0671	00684	1691
*0250	1845	3689 C	429 B	2662	15242	0711	00782	1518
0300	1725	3674 E	437	2681	15213	0784	00986	1354
0400	1543	3605 B	386	2670	15166	0927	01502	1479
0500	1327 E	3560 I	344 B	2682	15107	1071	02165	1376
0600	1118 D	3528 I	321	2698	15048	1202	02904	1229
*0700	0903	35134	312	2724	14985	1314	03644	0983

C-REF-NO 001	YR 1965	DEPTH 7681	WAVES 1	X2	AIR T 24.0	VIS
CONS. NO 024	MONTH 2	MXSAMPD 00	WAVES 2	05X3	WET B 20.5	STN 026
LAT 19-360N	DAY 18	NO.DPTH 1	WND-DIR 080		WW-CODE 02	
LON 67-302W	HR 00.1	W-COLOR	WND-FCE 05		CLD-TPE B	
MARSD SQ 043	C/I 1803	W-TRNSP	BARO		CLD-AMT 3	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
001	0000	2450 B	36434		2460	15353

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	2450 B	36434		2460	15353	0000	00000	3351

C-REF-NO 001 YR 1965 DEPTH 5002 WAVES 1 1322 AIR T 24.0 VIS 8
 CONS. NO 025 MONTH 2 MXSAMPD 07 WAVES 2 0353 WET B 20.0 STN 027
 LAT 23-020N DAY 19 NO.DPTH 8 WND-DIR 130 WW-CODE 01
 LON 71-570W HR 00.6 W-COLOR WND-FCE 02 CLD-TPE 8
 MARSD SQ 080 C/I 1803 W-TRNSP BARO 1016.7 CLD-AMT 3 HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
006	0000	2450 B	36646	477	2476	15355
006	0041	2415	36683	477	2489	15354
006	0090	2348	36717	475	2511	15346
006	0189	1995	36610	452	2602	15270
006	0287	1830	36503	458	2636	15239
006	0386	1765	36433	458	2647	15235
006	0484	1657	36236	431	2658	15217
006	0690	1167	35481	335	2704	15083

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	2450 B	36646	477	2476	15355	0000	00000	3198
0010	2447 B	36660	477	2478	15356	0032	00002	3183
0020	2441	36671	478	2480	15356	0064	00007	3163
*0030	2434 B	36681	478	2483	15356	0096	00015	3138
0050	2406	36692	477	2492	15353	0158	00040	3061
0075	2374	36710	476	2503	15350	0234	00089	2965
0100	2315 C	3671 B	473	2521	15339	0306	00153	2809
0125	2229 F	3669 C	467	2544	15322	0374	00232	2598
*0150	2140 F	3667 C	461	2567	15303	0437	00320	2388
*0175	2048 C	3663 B	455	2590	15282	0495	00415	2181
0200	1969	36597	452	2608	15265	0548	00517	2015
0225	1918	36569	453	2619	15254	0597	00624	1916
*0250	1876	36541	454	2628	15246	0644	00740	1841
0300	1820	36496	459	2639	15238	0735	00995	1755
0400	1753	36412	455	2649	15234	0909	01618	1692
0500	1621 B	3620 B	430	2664	15208	1073	02375	1570
0600	1413 B	35875	388	2685	15155	1222	03212	1382
*0700	1136	35431	328	2706	15073	1352	04071	1178

C-REF-NO 001	YR 1965	DEPTH 5176	WAVES 1 24X1	AIR T 24.0	VIS 8
CONS. NO 026	MONTH 2	MXSAMPD 00	WAVES 2 03X5	WET B 19.5	STN 028
LAT 24-361N	DAY 19	NO.DPTH 1	WND-DIR 240	WW-CODE 01	
LON 73-583W	HR 12.2	W-COLOR	WND-FCE 03	CLD-TPE	
MARSD SQ 080	C/I 1803	W-TRNSP	BARO 1014.0	CLD-AMT 0	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
176	0000	2380 B	36770		2506	15340

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	2380 B	36770		2506	15340	0000	00000	2910

C-REF-NO 001 YR 1965 DEPTH 4389 WAVES 1 3021 AIR T 20.6 VIS 8
 CONS. NO 027 MONTH 2 MXSAMPD 07 WAVES 2 XX WET B 18.4 STN 029
 LAT 25-442N DAY 20 NO.DPTH 8 WND-DIR 300 WW-CODE 01
 LON 76-372W HR 00.0 W-COLOR WND-FCE 04 CLD-TPE 8
 MARSD SQ 080 C/I 1803 W-TRNSP BARO 1012.4 CLD-AMT 3 HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
000	0000	2390 B	36519	487	2484	15339
000	0041	2375	36604	483	2495	15343
000	0090	2387	36668	483	2496	15355
000	0189	2141	36715	485	2570	15310
000	0287	1939	36616	445	2617	15271
000	0386	1807	36477	443	2640	15248
000	0484	1732	36351	443	2649	15241
000	0690	1326	35786	369	2697	15141

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	2390 B	36519	487	2484	15339	0000	00000	3119
0010	2394 B	36541	486	2484	15342	0031	00002	3119
0020	2396 C	36562	485	2485	15344	0063	00006	3114
*0030	2397 D	36582	484	2487	15346	0094	00014	3105
0050	2379	36618	483	2495	15346	0156	00040	3037
0075	2386 B	36652	483	2495	15352	0232	00089	3043
0100	2369 B	36679	484	2502	15352	0308	00157	2986
0125	2318 E	36699	486	2519	15344	0381	00241	2838
*0150	2257 E	36712	487	2537	15333	0451	00338	2670
*0175	2185 C	36716	486	2558	15319	0515	00446	2482
0200	2116	36708	481	2577	15305	0576	00562	2312
0225	2060	3669 B	471	2591	15294	0632	00685	2190
*0250	2009	3666 B	460	2603	15284	0686	00816	2085
0300	1918	36599	444	2621	15267	0787	01100	1922
0400	1797	36461	444	2642	15247	0973	01763	1760
0500	1674 H	3629 F	434 B	2658	15225	1144	02548	1626
0600	1504 E	3605 D	406	2679	15187	1299	03421	1449
*0700	1305	35754	364	2698	15135	1436	04335	1273

C-REF-NO 001	YR 1965	DEPTH 201	WAVES 1 3021	AIR T 23.2	VIS 8
CONS. NU 028	MONTH 2	MXSAMPD 02	WAVES 2 0222	WET B 16.3	STN 030
LAT 26-470N	DAY 20	NO.DPTH 7	WND-DIR 320	WW-CODE 02	
LON 79-567W	HR 15.3	W-COLOR	WND-FCE 03	CLD-TPE 2	
MARSD SQ 080	C/I 1803	W-TRNSP	BARO 1016.7	CLD-AMT 2	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
153	0000	2500 B	36144	478	2423	15361
153	0023	2503	36113	482	2419	15365
153	0047	2460	36163	477	2436	15360
153	0070	2288	36282	472	2496	15323
153	0093	2085	36206	446	2547	15274
153	0140	1457	35644	345	2658	15091
153	0173	1183	35402	310	2695	15002

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	2500 B	36144	478	2423	15361	0000	00000	3704
0010	2518 B	36122	480	2415	15367	0038	00002	3777
0020	2520 C	36114	480	2414	15369	0076	00008	3793
0030	2500	36119	481	2421	15366	0113	00017	3734
0050	2442	3618 B	477	2443	15356	0186	00047	3530
0075	2248	36279	468	2507	15314	0268	00098	2928
0100	1992 D	3613 F	431	2566	15249	0334	00157	2371
0125	1658 G	3584 I	377 B	2628	15153	0387	00217	1795
0150	1420 I	3564 I	345 C	2666	15081	0427	00273	1434
0175	1163 B	3538 B	307	2697	14995	0460	00327	1136

C-REF-NO 001	YR 1965	DEPTH 878	WAVES 1 0322	AIR T 22.6	VIS B
CONS. NO 029	MONTH 2	MXSAMPD 07	WAVES 2 XX	WET B 16.0	STN 031
LAT 28-163N	DAY 20	NO.DPTH 8	WND-DIR CALM	WW-CODE	
LON 79-062W	HR 23.2	W-COLOR	WND-FCE 00	CLD-TPE 8	
MARSD SQ 080	C/I 1803	W-TRNSP	BARO 1015.8	CLD-AMT 5	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
232	0000	2500 B	36338	473	2437	15363
232	0050	2516	36159	467	2419	15373
232	0100	2469	36414	431	2452	15373
232	0200	2094		398		
232	0300	1835	36493	426	2634	15242
232	0400	1742	36361	411	2647	15230
232	0500	1560	36038	361	2665	15188
232	0700	1108	35387	321	2708	15063

*WAVES NOT COMPATIBLE WITH WIND

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	2500 B	36338	473	2437	15363	0000	00000	3564
0010	2511 B	3632 F	470	2433	15367	0036	00002	3613
0020	2519	3631 I	468	2429	15371	0073	00007	3650
*0030	2523	3629 I	465	2427	15373	0109	00017	3677
0050	2516	36159	467	2419	15373	0184	00048	3760
0075	2502	3627 G	450	2431	15375	0277	00107	3654
0100	2469	36414	431	2452	15373	0367	00187	3461
0125	2387 E	3648 F	417	2482	15359	0450	00283	3192
0150	2298 G	3653 I	407	2512	15341	0527	00391	2916
*0175	2200 E	3656 I	401	2542	15321	0597	00507	2635
0200	2094	3658 I	398	2573	15298	0660	00627	2350
0225	2016	3658 I	404	2594	15281	0716	00750	2156
0250	1947	3657 I	411 B	2611	15266	0769	00877	2000
0300	1835	36493	426	2634	15242	0864	01146	1794
0400	1742	36361	411	2647	15230	1041	01776	1702
0500	1560	36038	361	2665	15188	1205	02531	1551
0600	1367 C	3577 H	348 B	2687	15139	1352	03356	1360
0700	1108	35387	321	2708	15063	1479	04201	1158

C-REF-NU 001	YR 1965	DEPTH 183	WAVES 1 0320	AIR T 20.6	VIS 8
CONS. NO 030	MONTH 2	MXSAMPD 01	WAVES 2 XX	WET B 17.4	STN 032
LAT 28-500N	DAY 21	NO.DPTH 6	WND-DIR CALM	WW-CODE 02	
LON 80-020W	HR 07.2	W-COLOR	WND-FCE 00	CLD-TPE 7	
MARSD SQ 081	C/I 1803	W-TRNSP	BARO 1013.9	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
072	0000	2220 B	36181	515	2508	15293
072	0025	2164	36095	502	2517	15282
072	0050	1944	35994	477	2568	15226
072	0074	1699	35924	375	2624	15158
072	0099	1593	35854	365	2644	15130
072	0149	1553	35665	310	2638	15123

*WAVES NOT COMPATIBLE WITH WIND

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT. EN	SVA
0000	2220 B	36181	515	2508	15293	0000	00000	2893
0010	2201 C	36143	520 B	2510	15289	0029	00001	2874
0020	2166 D	36111 B	518 B	2517	15282	0058	00006	2812
0030	2128	36074	501	2525	15273	0086	00013	2737
0050	1944	35994	477	2568	15226	0137	00034	2334
0075	1693	35921	374	2626	15157	0189	00066	1798
0100	1566 E	35846	336 F	2649	15121	0231	00104	1578
0125	1515 D	35758	309 E	2654	15108	0270	00149	1541
*0150	1556	35661	311	2637	15124	0311	00207	1709

C-REF-NO 001	YR 1965	DEPTH 140	WAVES 1 3321	AIR T 18.3	VIS 8
CONS. NO 031	MONTH 2	MXSAMPD 01	WAVES 2 XX	WET B 15.3	STN 033
LAT 30-280N	DAY 21	NO.DPTH 6	WND-DIR 330	WW-CODE 02	
LON 80-090W	HR 19.1	W-COLOR	WND-FCE 02	CLD-TPE 3	
MARSD SQ 117	C/I 1803	W-TRNSP	BARO 1012.5	CLD-AMT 6	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
191	0000	2500 B	36144	472	2423	15361
191	0025	2524	36095	474	2412	15370
191	0050	2422	36276	457	2456	15352
191	0075	2184	36279	457	2525	15297
191	0100	2096	36163	502	2541	15277
191	0125	1987	36167	501	2570	15252

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	2500 B	36144	472	2423	15361	0000	00000	3704
0010	2526	3615 H	471	2415	15369	0038	00002	3781
0020	2531	3616 I	469	2414	15372	0076	00008	3793
0030	2514	3613 D	471	2417	15369	0114	00018	3768
0050	2422	36276	457	2456	15352	0186	00047	3405
0075	2184	36279	457	2525	15297	0263	00095	2755
0100	2096	36163	502	2541	15277	0331	00156	2616
0125	1987	36167	501	2570	15252	0393	00227	2343

C-REF-NO 001	YR 1965	DEPTH 201	WAVES 1 30X1	AIR T 18.3	VIS 8
CONS. NO 032	MONTH 2	MXSAMPD 00	WAVES 2 XX	WET B 13.7	STN 034
LAT 30-390N	DAY 21	NO.DPTH 1	WND-DIR 300	WW-CODE	
LON 80-036W	HR 23.3	W-COLOR	WND-FCE 02	CLD-TPE 8	
MARSD SQ 117	C/I 1803	W-TRNSP	BARO 1013.0	CLD-AMT 4	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
233	0000	2480 B	36133		2428	15356

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	2480 B	36133		2428	15356	0000	00000	3654

C-REF-NO 001	YR 1965	DEPTH 759	WAVES 1 0122	AIR T 14.0	VIS 8
CONS. NO 033	MONTH 2	MXSAMPD 07	WAVES 2 3334	WET B 12.0	STN 035
LAT 31-360N	DAY 22	NO.DPTH 8	WND-DIR 010	WW-CODE 03	
LUN 77-470W	HR 23.4	W-COLOR	WND-FCE 02	CLD-IPE 8	
MARSD SQ 116	C/I 1803	W-TRNSP	BARO 1017.1	CLD-AMT 4	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
234	0000	2365 B	36289	475	2474	15330
234	0050	2412	36231	473	2456	15349
234	0100	2315	36516	452	2506	15337
234	0200	2153	36719	405	2567	15315
234	0300	1898	36564	457	2624	15261
234	0400	1838	36498	455	2634	15260
234	0500	1728	36298	380	2646	15242
234	0700	1136	35401	308	2704	15073

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	2365 B	36289	475	2474	15330	0000	00000	3214
0010	2372 B	3629 E	475	2472	15334	0032	00002	3238
0020	2378 C	3629 I	474	2471	15337	0065	00007	3254
*0030	2381 E	3630 I	473	2470	15340	0098	00015	3264
0050	2412	36231	473	2456	15349	0165	00043	3409
0075	2372 B	3636 G	464	2477	15345	0248	00096	3212
0100	2315	36516	452	2506	15337	0326	00165	2951
0125	2277 B	3661 B	436	2524	15333	0398	00248	2790
0150	2237 B	3667 B	423 B	2540	15328	0466	00344	2645
*0175	2196 B	3671 B	412	2555	15322	0531	00452	2516
0200	2153	36719	405	2567	15315	0593	00571	2403
0225	2084 C	3669 E	416 B	2584	15301	0652	00698	2251
0250	2019 D	3666 F	428 B	2599	15287	0707	00832	2116
0300	1898	36564	457	2624	15261	0808	01116	1897
0400	1838	36498	455	2634	15260	0996	01790	1833
0500	1728	36298	380	2646	15242	1177	02622	1748
0600	1471 C	3592 B	362 D	2676	15175	1339	03533	1470
0700	1136	35401	308	2704	15073	1474	04427	1200

C-REF-NO 001	YR 1965	DEPTH 190	WAVES 1 3620	AIR T 11.7	VIS 8
CONS. NO 034	MONTH 2	MXSAMPD 02	WAVES 2 XX	WET B 06.4	STN 036
LAT 33-120N	DAY 23	NO.DPTH 7	WND-DIR 020	WW-CODE 02	
LON 77-175W	HR 07.4	W-COLOR	WND-FCE 03	CLD-TPE 4	
MARSD SQ 116	C/I 1803	W-TRNSP	BARO 1019.9	CLD-AMT 1	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
074	0000	2080 B	36357	491	2560	15259
074	0025	2131	36321	487	2543	15276
074	0050	2119	36158	462	2534	15275
074	0075	1822	36261	394	2620	15199
074	0100	1612	36033	351	2653	15138
074	0150	1246	35536	310	2693	15022
074	0175	1006	35237	305	2715	14938

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	2080 B	36357	491	2560	15259	0000	00000	2397
0010	2136 D	3631 H	495	2541	15275	0025	00001	2582
0020	2164 G	3627 I	493	2530	15283	0052	00005	2688
0030	2143 B	3628 D	485	2537	15279	0078	00012	2625
0050	2119	36158	462	2534	15275	0131	00034	2661
0075	1822	36261	394	2620	15199	0188	00069	1852
0100	1612	36033	351	2653	15138	0231	00107	1544
0125	1434 C	35796	324	2675	15083	0267	00149	1344
0150	1246	35536	310	2693	15022	0299	00193	1170
0175	1006	35237	305	2715	14938	0326	00238	0968

C-REF-NO 001	YR 1965	DEPTH 3612	WAVES 1 0622	AIR T 13.8	VIS B
CONS. NO 035	MONTH 2	MXSAMPD 07	WAVES 2 0632	WET B 08.7	STN 037
LAT 33-135N	DAY 23	NO.DPTH 8	WND-DIR 040	WW-CODE 02	
LUN 75-170W	HR 15.6	W-COLOR	WND-FCE 04	CLD-TPE	
MARSD SQ 116	C/I 1803	W-TRNSP	BARO 1024.1	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
156	0000	2070 B	36512	508	2574	15258
156	0050	2093	36479	508	2566	15272
156	0100	2079	36533	503	2574	15277
156	0200	1947	36597	419	2614	15258
156	0300	1828	36522	462	2638	15241
156	0400	1787	36484	477	2646	15245
156	0500	1764	36460	477	2650	15254
156	0700	1464	35925	387	2678	15189

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	2070 B	36512	508	2574	15258	0000	00000	2259
0010	2077 B	36507	510	2572	15261	0023	00001	2285
0020	2083	3650 B	512	2570	15265	0046	00005	2307
*0030	2088	3650 C	512	2569	15267	0069	00011	2324
0050	2093	36479	508	2566	15272	0116	00030	2361
0075	2090	3650 B	507	2568	15276	0176	00068	2348
0100	2079	36533	503	2574	15277	0234	00121	2305
0125	2052 B	36558	481 C	2583	15274	0291	00186	2226
0150	2021 B	36577	459 C	2593	15270	0346	00264	2142
*0175	1986 B	36590	439 C	2603	15265	0399	00352	2053
0200	1947	36597	419	2614	15258	0450	00449	1959
0225	1913	3658 B	425 B	2621	15253	0498	00554	1894
0250	1882	3657 C	434 B	2628	15248	0545	00669	1838
0300	1828	36522	462	2638	15241	0636	00924	1757
0400	1787	36484	477	2646	15245	0811	01553	1720
0500	1764	36460	477	2650	15254	0984	02354	1716
0600	1624 D	3622 G	442	2665	15226	1152	03296	1597
0700	1464	35925	387	2678	15189	1307	04333	1483

C-REF-NO 001 YR 1965 DEPTH 2999 WAVES 1 0522 AIR T 13.0 VIS 8
 CONS. NO 036 MONTH 2 MXSAMPD 07 WAVES 2 0332 WET B 07.5 STN 038
 LAT 34-033N DAY 23 NO.DPTH 8 WND-DIR 050 WW-CODE 03
 LON 75-235W HR 20.7 W-COLOR WND-FCE 04 CLD-TPE 4
 MARSD SQ 116 C/I 1803 W-TRNSP BARU 1023.4 CLD-AMT 8 HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
207	0000	2310 B	36341	482	2494	15318
207	0050	2363	36310	477	2476	15338
207	0100	2130	36560	493	2562	15291
207	0200	2088	36604	484	2577	15297
207	0300	1813	36503	457	2641	15236
207	0400	1756	36437	457	2650	15235
207	0500	1556	36059	391	2668	15187
207	0700	0994	35219	301	2715	15020

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	2310 B	36341	482	2494	15318	0000	00000	3023
0010	2306 E	3635 E	482	2496	15318	0030	00002	3010
0020	2301 I	3636 I	483	2498	15319	0061	00006	2994
*0030	2296 I	3637 I	483	2500	15319	0091	00014	2976
0050	2363	36310	477	2476	15338	0153	00040	3213
0075	2256 F	3643 F	485	2516	15317	0229	00088	2841
0100	2130	36560	493	2562	15291	0295	00146	2419
0125	2104 H	3661 E	494	2572	15289	0355	00215	2326
0150	2088 I	3663 F	493	2578	15289	0413	00297	2278
*0175	2083 H	3663 E	490	2580	15291	0470	00392	2274
0200	2088	36604	484	2577	15297	0528	00504	2315
0225	2020 E	3658 B	477	2593	15282	0584	00626	2163
0250	1951 F	3656 C	470	2610	15267	0637	00754	2015
0300	1813	36503	457	2641	15236	0731	01019	1734
0400	1756	36437	457	2650	15235	0903	01636	1680
0500	1556	36059	391	2668	15187	1065	02380	1527
0600	1330 D	3574 I	364 C	2692	15126	1208	03183	1306
0700	0994	35219	301	2715	15020	1329	03980	1076

C-REF-NO 001	YR 1965	DEPTH 157	WAVES 1 0522	AIR T 08.3	VIS 8
CONS. NO 037	MONTH 2	MXSAMPD 01	WAVES 2 XX	WET B 07.3	STN 039
LAT 34-530N	DAY 24	NO.DPTH 6	WND-DIR 050	WW-CODE 02	
LON 75-230W	HR 01.5	W-COLOR	WND-FCE 05	CLD-TPE 4	
MARSD SQ 116	C/I 1803	W-TRNSP	BARO 1024.2	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
015	0000	1380 B	34553	600	2590	15030
015	0025	1583	35023	572	2582	15104
015	0050	1641	35241	559	2586	15129
015	0075	1773	35971	460	2610	15181
015	0100	1399	35695	397	2674	15066
015	0150	1163	35433	305	2701	14992

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1380 B	34553	600	2590	15030	0000	00000	2109
0010	1451 D	3467 I	600 B	2585	15056	0022	00001	2165
0020	1516 G	3482 I	594 C	2581	15080	0043	00005	2199
0030	1597 B	3506 G	572	2581	15110	0066	00010	2201
0050	1641	35241	559	2586	15129	0110	00028	2168
0075	1773	35971	460	2610	15181	0161	00061	1947
0100	1399	35695	397	2674	15066	0203	00097	1339
0125	1407 I	3586 I	338	2685	15075	0235	00135	1242
0150	1163	35433	305	2701	14992	0265	00176	1092

C-REF-NO 001	YR 1965	DEPTH 3713	WAVES 1 0523	AIR T 13.0	VIS 8
CONS. NO 038	MONTH 2	MXSAMPD 06	WAVES 2 0022	WET B 10.6	STN 040
LAT 35-190N	DAY 24	NO. OPTH 8	WND-DIR 070	WW-CODE 61	
LON 73-255W	HR 12.5	W-COLOR	WND-FCE 06	CLD-TPE 6	
MARSD SQ 116	C/I 1803	W-TRNSP	BARO 1021.2	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
125	0000	2170 B	36467	494	2543	15284
125	0046	2313	36423	492	2499	15327
125	0092	2126	36554	493	2562	15288
125	0184	1923	36587	457	2619	15249
125	0276	1808	36462	457	2639	15230
125	0368	1773	36318	468	2637	15233
125	0460	1695	35596	442	2600	15217
125	0644	1259	35590	336	2695	15108

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT. EN	SVA
0000	2170 B	36467	494	2543	15284	0000	00000	2553
0010	2193 E	3647 C	495	2537	15291	0026	00001	2618
0020	2211 H	3647 E	495	2532	15297	0053	00005	2672
*0030	2226 I	3647 H	495	2528	15303	0080	00012	2714
0050	2302 B	36432	492	2503	15325	0137	00036	2956
0075	2211 E	3650 C	493	2534	15307	0207	00081	2668
0100	2102	36566	490	2570	15283	0270	00137	2341
0125	2035 B	3659 B	481	2590	15270	0327	00202	2158
*0150	1980 B	3660 B	471	2605	15259	0380	00276	2019
*0175	1936	36594	461	2616	15251	0429	00359	1925
0200	1897	36572	455	2625	15244	0477	00450	1853
0225	1861	3654 B	454	2632	15238	0523	00550	1797
*0250	1832	3651 B	455	2636	15233	0568	00659	1760
0300	1797 B	3645 F	461	2641	15231	0656	00908	1732
0400	1754	3607 I	462	2622	15230	0841	01578	1938
0500	1616 C	3577 I	431	2632	15202	1033	02463	1868
0600	1387	3563 I	372	2671	15144	1203	03417	1509

C-REF-NO 001 YR 1965 DEPTH 438 WAVES 1 0927 AIR T 17.0 VIS 7
 CONS. NO 039 MONTH 2 MXSAMPD 02 WAVES 2 XX WET B 15.5 STN 041
 LAT 35-335N DAY 24 NO.DPTH 8 WND-DIR 090 WW-CODE 81
 LON 74-495W HR 21.0 W-COLOR WND-FCE 08 CLD-TPE 8
 MARSD SQ 116 C/I 1803 W-TRNSP BARO 1010.0 CLD-AMT 8 HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
210	0000	1950 B	36193	513	2582	15222
210	0025	1966	36159	510	2575	15230
210	0050	1660	35549	518	2605	15138
210	0075	1571	35601	457	2629	15116
210	0100	1489	35686	400	2654	15095
210	0150	0994	35141	351	2709	14928
210	0200	0911	35113	349	2721	14905
210	0250	0838	35056	357	2728	14885

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1950 B	36193	513	2582	15222	0000	00000	2186
0010	1927 I	3609 I	521 B	2580	15216	0022	00001	2206
0020	1895 I	3600 I	524 C	2581	15207	0044	00005	2200
0030	1909 E	3603 I	514	2581	15213	0066	00010	2211
0050	1660	35549	518	2605	15138	0109	00027	1987
0075	1571	35601	457	2629	15116	0156	00057	1761
0100	1489	35686	400	2654	15095	0197	00094	1531
0125	1243 I	3544 I	367	2687	15016	0232	00134	1228
0150	0994	35141	351	2709	14928	0260	00173	1013
0175	0926 F	3510 H	346	2717	14907	0285	00214	0942
0200	0911	35113	349	2721	14905	0308	00259	0911
0225	0815 I	3501 I	346	2728	14872	0330	00307	0845
0250	0838	35056	357	2728	14885	0352	00360	0850

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CANADA



OCEAN WEATHER STATION 'P'

NORTH PACIFIC OCEAN

April 17 to June 3, 1965

NO. 3

1966 Data Record Series

Canadian Oceanographic Data Centre

**Programmed by the
Canadian Committee on Oceanography**

1966

ROGER DUHAMEL, F. R. S. C.
QUEEN'S PRINTER AND CONTROLLER OF STATIONERY
OTTAWA, 1966

Cat. No. M58-1/1966-3

Price \$1.00

OCEAN WEATHER STATION 'P'

NORTH PACIFIC OCEAN

April 17 to June 3, 1965

CODC Reference: 02-65-003

NO. 3

1966 Data Record Series

Canadian Oceanographic Data Centre
615 Booth St., Ottawa, Canada

Programmed by the Canadian Committee on Oceanography

FISHERIES RESEARCH BOARD OF CANADA

Ocean Weather Station "P" North Pacific Ocean

Ships: CCGS "St. Catharines" and CCGS "Stonetown"

Local Cruise
designations: P-65-2 Patrol No. 65

Cruise periods: April 17 - June 3, 1965 May 29 - July 1, 1965

Observer: D. G. Robertson

PACIFIC OCEANOGRAPHIC GROUP - Nanaimo, B.C.

SECTION I

Description of data collection procedures



Figure 1.

The Canadian Weather Ship C.C.G.S. " St. Catharines ".

(D.O.T. Photo)

The oceanographic winch is located on the starboard side of the signal deck, just aft of the bridge wing.

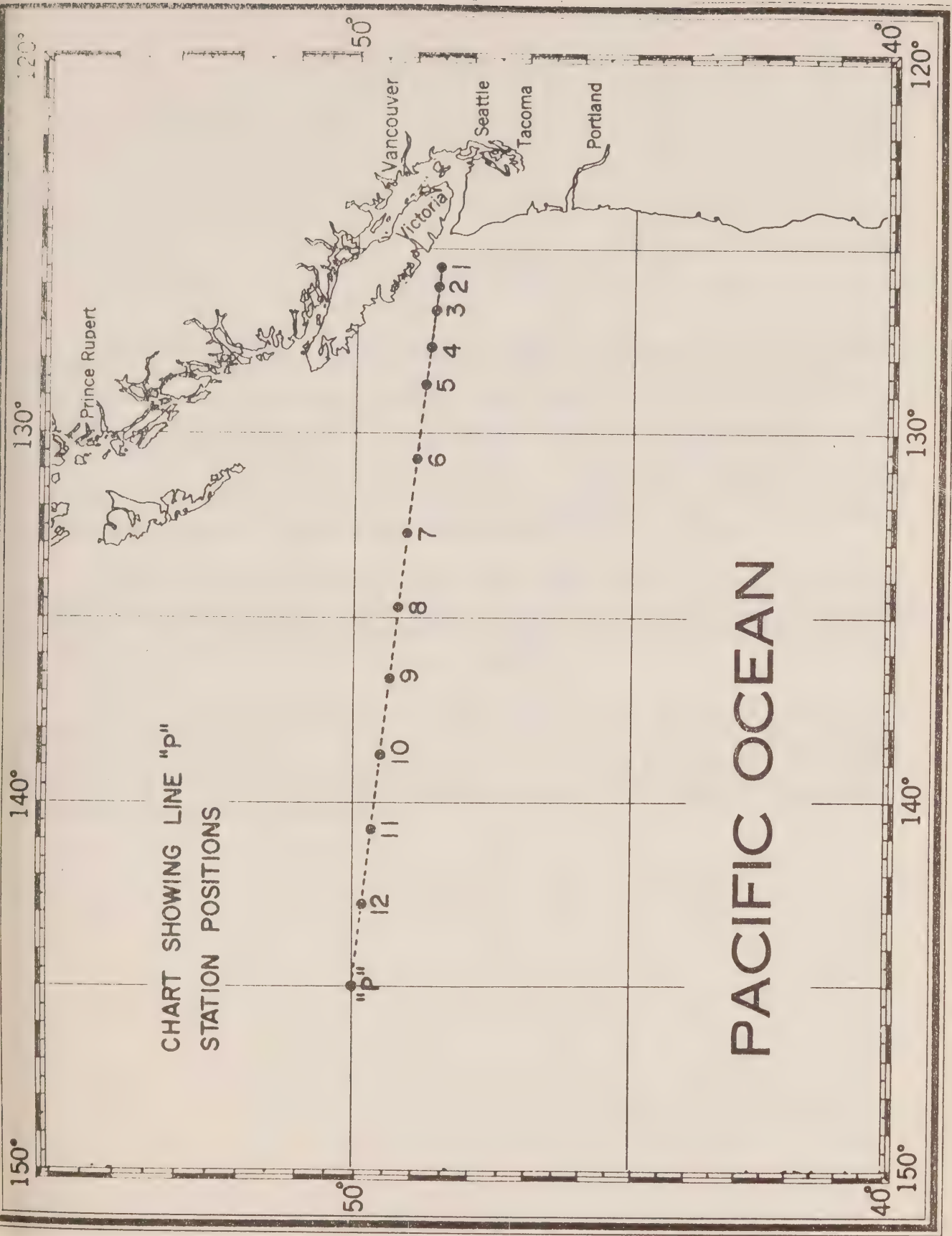


Figure 2.

The Canadian Weather Ship C.C.G.S. "Stonetown".

(D.O.T. Photo)

Bathythermograph soundings boom can be seen below the bridge on the signal deck.



INTRODUCTION

Canadian operation of Ocean Weather Station "P" (latitude 50°00'N, longitude 145°00'W) was inaugurated in December 1950. The Station is manned by two vessels of the Canadian naval frigate class operated by the Marine Services of the Department of Transport. They are the CCGS "St. Catharines" and the CCGS "Stonetown" (Fig. 1 and 2) (Atlantic Oceanographic Group, MS, 1961). Each ship remains on Station for a period of 6 weeks, and is then relieved by the alternate ship, thus maintaining a continuous watch. The chief purpose of the Station is to operate as a meteorological station for surface and upper-air observations, and as an air-sea rescue station.

Bathythermograph observations have been made at Station "P" since July 1952. A program of more extensive oceanographic observations was commenced in August 1956. Since April 1959, a series of oceanographic stations has been frequently observed along the route between Station "P" and Swiftsure Bank (Fig. 3).

The CCGS "St. Catharines" is equipped with deck and laboratory facilities required to make bathythermograph and oceanographic observations. Oceanographers from the Pacific Oceanographic Group accompany the ship on each patrol. The CCGS "Stonetown" is equipped with bathythermograph equipment only. The BT observations are made by members of the ship's crew.

CRUISE LOG, CCGS "ST. CATHARINES", SURVEY P-65-2

- April 16: departed from Esquimalt Graving Dock for Ocean Weather Station "P"; observed 10 oceanographic stations enroute.
- April 19: relieved CCGS "Stonetown", and commenced regular oceanographic observations program.
- May 31: rendezvous with CCGS "Stonetown", and proceeded on return journey to base; 12 oceanographic stations observed enroute.
- June 3: berthed at Esquimalt, B.C.

OBSERVATIONAL PROCEDURES

1. Samples at depths were obtained with Nansen reversing water sample bottles. Stations to 400 m depth were observed in one cast; stations to 200 m were observed in two casts - 10 to 400 m and 500 to the deepest depth; stations to 4200 m were observed in 2 casts - 10 to 600 m and 800 to the deepest depth.
2. Seawater temperatures (except 0 m) were measured with protected reversing thermometers of German or Japanese manufacture. The arrangement of the thermometers on the water sample bottles was as follows: 10 to 125 m - 2 protected thermometers at each depth; 150 to 250 m - 3 protected thermometers, 300 m to deepest bottle - 2 protected and one unprotected thermometer at each depth.
3. Surface samples (0 m) for salinity and dissolved oxygen determinations were obtained at each oceanographic station in a one-gallon plastic bucket. The surface temperature was measured in this sample with an armoured thermometer graduated in 0.5C° intervals. Samples were taken also when BT observations were made enroute to and from Station "P".
4. Water transparency observations were made with a white secchi disc of 30 cm diameter.
5. Station locations were determined by the officers of the watch, who also made the meteorological observations reported with the oceanographic data.

LABORATORY PROCEDURES

The salinity determinations of the oceanographic station water samples and the surface samples collected during Survey P-65-2 were made with an inductive salinometer, Model 601 MK III, manufactured by Auto-Lab Industries Pty. Ltd., Sydney, Australia (Brown and Hamon, 1961). Most of the samples were analysed on board ship. The salinity data are the means of duplicate determinations whose "conductivity ratio" values fell within an acceptable range. The accuracy of the determinations at the 35‰ salinity level is stated to be $\pm 0.003\%$ (Brown and Hamon, 1961). The surface samples collected during the "Stonetown" Patrol No. 65 were analysed in the shore laboratory using the MK III conductivity salinometer. These data are from a single determination and have an accuracy range of $\pm 0.009\%$ at the 95% probability level (Strickland, MS, 1958).

The surface salinity data from the "St. Catharines" and the "Stonetown" are presented in a table in Section V of this data record.

The dissolved oxygen analyses were done in the shipboard laboratory by a modified Winkler method (Strickland and Parsons, 1965).

BATHYTHERMOGRAPH OBSERVATIONS

BT observations are made by both ships enroute to and from Station "P" at each 40' interval of longitude, whenever weather and operating schedule permits. On Station, BT observations are made every 3 hours continuously throughout the patrol, except during intervals of rough weather.

The BT traces have been drawn on standard pre-printed graphs resembling BT calibration grids. The slides were positioned on the appropriate calibration grid in an adjustable holder. The BT traces were aligned on the grid using a temperature value obtained from a thermograph recording of the engine-room intake temperature, which had been checked occasionally with a 3 m reversing thermometer temperature. The top of the trace was always aligned with the zero-depth grid line.

The bathythermograms are arranged in a chronological order on the pages. The date-time (year-month-day-hour) and position information are recorded below each bathythermogram.

PERSONNEL

The oceanographer on board CCGS "St. Catharines" was Mr. D.G. Robertson. The ship's master was Captain A.A.R. Dykes. The officers and men of both weather-ships took the BT observations, and the crew of the "St. Catharines" gave assistance to the oceanographer in making the observations.

Section II

Description of the machine-generated data records

INTRODUCTION

This section applies to the machine processing phase of the data reduction and computation.

The oceanographic data previously recorded on CODC data summary forms, a sample of which is shown on the next page, are transferred to punch-cards for subsequent electronic data processing on an IBM 1620 computer, using CODC's OCEANS II program. In addition to computing routine derived quantities, the program carries out unit and format conversions, range checks, plausibility tests, internal editing, and if required, interpolation at standard oceanographic depths. When interpolations are carried out, additional derived values are computed.

After the data have been processed, the data record is prepared using an IBM 1401 computer configuration with the OCEAN REPORT III program, which provides for pre-edited high speed print-out on continuous direct-image masters. These masters subsequently yield the required volume of copies for distribution.

Provision has been made to enter an "estimate of precision" for each observed variable selected for interpolation at standard oceanographic depths. The precision depends on the instrument and/or technique used to determine the variable. A standard precision stated as a **standard deviation** (σ) can be determined for each instrument or technique under routine field conditions by making duplicate determinations of the variables for a homogeneous sample of sea water. These standard deviations are given for each cruise under "GENERAL INFORMATION" in section III of the data record.

The measurement error estimate of a specific observation in this data record, is stated as a multiple of the standard deviation derived as above, and entered in a column immediately to the right of the reported variable. In order to distinguish it from an additional decimal digit, the measurement error estimate is recorded alphabetically, (i.e., $1\sigma = A$, $2\sigma = B$, etc.; in this data record "A" is suppressed).

An option is provided with respect to the measurement of the salinity variable. If observed to three decimal digits, the last digit takes the place of the measurement error estimate.

In the past, a number of methods for both manual and machine interpolation have been developed. Studies and comparisons of the several methods have shown that no single method is universally acceptable. The manual methods are the most elaborate and flexible, but often require subjective decisions. In machine interpolation, all the present methods fail to yield acceptable results under some circumstances. Hence, it is considered necessary to qualify interpolated values by stating an "interpolation error estimate" derived from the particular interpolation formula used. There are two purposes in stating the error estimates; first, to give an indication of the quality of the interpolated data; second, to allow the oceanographer to redesign his observational procedures in order to reduce interpolation errors in future observations.

The interpolation scheme chosen for the OCEANS II program consists of a combination of two 3-point interpolations using the Lagrangian interpolation polynomial, as recommended by Rattray (1962). A parabola is fitted through three values of a given variable (T, S, O_2) considered as a function of depth. The two interpolation parabolas require a total of four points (observed depths). The middle points are common to both parabolas. The average of the two values obtained from the parabolas at standard depth is taken as the interpolated value, and a function of their difference as an estimate of the interpolation error.

This function combined with the "measurement error estimate" comprises the "combined measurement and interpolation error estimate". It is expressed as a multiple of the standard deviation of measurement (σ) under normal routine field conditions by:

CANADIAN OCEANOGRAPHIC DATA CENTRE

1 IDENT. CODE		2 LATITUDE (N=+)		3 LONGITUDE (W=+)		5 DATE		6 TIME		7 DEPTH		9 NO. DEPTHS OBS'D.		VESSEL			
COUNTRY INST.		DEG. MIN.		DEG. MIN.		YEAR MONTH DAY		HOURS G.M.T.		TO BOTTOM				ENTERED BY			
1 8														CHECKED BY			
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15		19 20 21 22 23 24 25 26 27 28 29 30 31		34 35													
10 WATER		11 WAVES I		12 WAVES II		13 WIND		14 BAROMETER		15 AIR TEMP.		16 WET BULB		17 W.W. CODE			
COLOUR TRANS.		DW DP PWHW		DW DP Pw HW		DIR.		SPEED		10		10		(SEPT. 62)			
36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80		21 UNASSIGNED		22 CRUISE REFERENCE NUMBER		23 CONSEC. NUMBER		24									

OBSERVER V.E.D. CARD		6 TIME		7 DEPTH OF SAMPLE		8 TEMPERATURE		9 SALINITY		10 OXYGEN		13 PO ₄ - P		14 TOTAL - P		15 NO ₂ - N		16 NO ₃ - N		17 SiO ₃ - Si		18 P.H.		CARD TYPE	
HOURS G.M.T.		10		e		↓		↓		↓		↓		↓		↓		↓		↓		↓		3	
1																								3	
2																								3	
3																								3	
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17																								3	
18																								3	
19																								3	
20																								3	
55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72																								80	

$$\frac{\sigma_i}{\sigma} = \left\{ \frac{(\Delta V_i)^2}{\sigma^2} + \sum_{n=j-2}^{j+1} (\gamma_n)^2 \left(\frac{\sigma_n}{\sigma} \right)^2 \right\}^{1/2}, \text{ where}$$

σ = Standard deviation of the combined error estimates at standard oceanographic depth,
 ΔV_i = the interpolation error estimate of variable "V" at standard oceanographic depth = $1/3 (\bar{V}_{i_1} - V_{i_2})$
 γ = Interpolation polynomial coefficient.

Z_j = Observed depth.

Z_i = Standard oceanographic depth, such that: $Z_{j-2} < Z_{j-1} < Z_i < Z_j < Z_{j+1}$

The integral part of the fraction $\frac{\sigma_i}{\sigma}$, if ≥ 2 , is reported in this Data Record following the interpolated variable. It represents the combined measurement and interpolation error estimate. In order to distinguish it from an additional decimal digit, it is recorded alphabetically (e.g.: 2 as "B", 3 as "C", etc.).

With respect to the interpolated value of the salinity variable if reported to three decimal digits, the interpolation error estimate is given only when $\frac{\sigma_i}{\sigma} \geq 2$ (the salinity is then recorded to two decimal places). If less than 2, the mean obtained from the two interpolation parabolas is reported to three decimal places.

EXPLANATION OF DATA RECORD HEADINGS

MASTER HEADINGS

(1) C-REF-NO	(6) YR	(11) DEPTH	(16) WAVES 1	(21) AIR T	(26) VIS
(2) CONS. NO	(7) MONTH	(12) MXSAMPD	(17) WAVES 2	(22) WET B	(27) STN
(3) LAT	(8) DAY	(13) NO. DPTH	(18) WND-DIR	(23) ww-CODE	
(4) LON	(9) HR	(14) W-COLOR	(19) WND-FCE	(24) CLD-TPE	
(5) MARSD SQ	(10) C/I	(15) W-TRNSP	(20) BARO	(25) CLD-AMT	(28) HW

- (1) CRUISE REFERENCE NUMBER: Assigned by the Institute. Commences with 001 at the beginning of each year (effective Jan. 1, 1963). Prior to that date the CRN was a number designated by CODC.
- (2) CONSECUTIVE NUMBER: Indicates the chronological order in which the stations were occupied.
- (3) LATITUDE: Indicate the position of the platform at the time of observation.
- (4) LONGITUDE:
- (5) MARSDEN SQUARE: Designates the geographic area code of the observation (see Marsden square chart).
- (6) YEAR:
- (7) MONTH:
- (8) DAY:
- (9) HOUR: The time (Greenwich Mean Time) at which the surface environmental data were recorded. It is reported to tenths of hours (Table 1).
If an "X" precedes the value for HOUR, (prior to Jan. 1, 1963) it indicates that the reported time is doubtful.
- (10) COUNTRY/INSTITUTE: The International Geophysical Year (IGY) Country Code/Institute Code - see Table 11.
- (11) DEPTH: The sounding reported in metres. If corrected, this is stated in the "GENERAL INFORMATION" chapter of section III. Charted depths are preceded by the letter "C".
- (12) MAXIMUM SAMPLING DEPTH: A code to indicate the deepest sampling depth (used for high speed sorting).
00 m - 50 m = 00
51 m - 150 m = 01
151 m - 250 m = 02
etc.

- (13) NUMBER OF DEPTHS: The number of levels observed (this is entered to initiate a computer safety check, guarding against the loss of punch-cards).
- (14) WATER COLOUR: The Forel-Ule Code (see table 2 and NOTE under FIELD "15" below).
- (15) WATER TRANSPARENCY: The depth in metres at which a Secchi disc (white disc, 30 cm. in diameter) just disappears from view, or the optical density expressed in percentage;
- NOTE: The "GENERAL INFORMATION" chapter in section III of the data record will state which method was used.
- (16) WAVES 1
($d_W d_W P_W H_W$ -code): The direction, period and height of the **wind-propagated** wave system. (See Tables 3, 4 and 5). Ref: World Meteorological Organization Codes 0885, 3155, 1555.
- (17) WAVES 2
($d_W d_W P_W H_W$ -code): The direction, period and height of the predominant **non-wind-propagated** wave system. (See Tables 3, 4 and 5). Ref: World Meteorological Organization Codes 0885, 3155, 1555.
- (18) WIND DIRECTION: The true direction to the nearest 10 degrees from which the wind is blowing (wind direction 990 means:—wind variable or direction unknown).
- (19) WIND FORCE
(WND-FCE): Beaufort notation (See Table 6).
- WIND SPEED
(WND-SPD): Anemometer reading reported in metres per second. Instrument height reported in "GENERAL INFORMATION" chapter of section III.
- (20) BAROMETER: The barometric pressure reported in millibars: the "GENERAL INFORMATION" chapter in Section III of the data record will state the type of instrument used.
- (21) AIR TEMPERATURE: In degrees Celsius.
- (22) WET BULB: In degrees Celsius.
- (23) ww CODE: Present Weather Code (See Table 7). Ref: WMO Code 4677
- (24) CLOUD TYPE: The type of predominating clouds (See Table 8). Ref: WMO Code 0500.
- (25) CLOUD AMOUNT: The sky coverage in eighths (See Table 9) Ref: WMO Code 2700
- (26) VISIBILITY: Visibility at the surface (See Table 10). Ref: WMO Code 4300.
- (27) STATION: A station reference number, assigned by the institute prior to, or during the survey.
- (28) HOURS AFTER HIGH WATER: Indicates the state of the tide for nearshore observations.

OBSERVED DATA HEADINGS

(1) GMT	(2) DEPTH	(3) TEMP	(4) SAL	(5) OXYGEN	(6) SGMT
(7) SOUND	(8) PO ₄	(9) -P-	(10) NO ₂	(11) NO ₃	(12) SiO ₂
					(13) pH.

NOTE: Headings (1) to (7) will always be present. Headings (8) to (13) appear only when one or more additional chemical entries were made.

(1) G.M.T.: The Greenwich Mean Time of (in-situ) thermometer inversion and sea water sample collection.

When a multiple cast was initiated prior to and continued after midnight, the times indicated are uninterrupted by the change of day and appear beyond 24.0 hours. This will be accompanied by a statement: "MULTIPLE CAST CONTINUED NEXT DAY", which is printed following the last level of observed values.

(2) DEPTH: The depth in metres at the reversal time of deepest cast.

(3) TEMPERATURE: Temperatures from deepsea reversing thermometers, read to 0.01° C. Surface temperature measurement procedures are described in the chapter "OBSERVATION PROCEDURES" of section I, and/or the "GENERAL INFORMATION" chapter of section III. An alphabetical character following the temperature value represents the measurement error estimate referred to in the INTRODUCTION to this section.

(4) SALINITY: Salinity as defined by: $S = 0.03 + 1.805 C1\%$, reported in:

- a. 1/100 parts per 1000, or
- b. 1/1000 parts per 1000.

In case a: an alphabetical character following the value is the measurement error estimate as referred to under (3).

In case b: no error estimate indication is provided for, but an additional decimal digit takes its place.

(5) OXYGEN: The concentration of dissolved oxygen expressed in millilitres per litre to 2 decimal places.

An alphabetical character following the value is the measurement error estimate as referred to under (3).

(6) SIGMA-T: The specific gravity anomaly as defined by: $(\text{Specific gravity} - 1) \times 10^3$ (e.g., σ_t reported as 2456, reads 24.56, and corresponds to a specific gravity of 1.02456).

(7) SOUND: The sound velocity is reported in m/sec. to 1 decimal place (e.g., 1437.9 m/sec.). The computation is carried out using Wilson's formula (1960), expressed in terms of temperature, salinity and total pressure.

- (8) PO_4 Phosphate-Phosphorus reported to hundredths of microgram-atoms per litre.
- (9) -P- Total Phosphorus reported to hundredths of microgram-atoms per litre.
- (10) NO_2 Nitrite-Nitrogen reported to hundredths of microgram-atoms per litre — No dissolved nitrogen included —
- (11) NO_3 Nitrate-Nitrogen reported to tenths of microgram-atoms per litre.
- (12) SiO_2 Silicate-Silicon reported in whole microgram-atoms per litre.
- (13) pH The pH value.

NOTE: "TRC" (trace) is reported when a chemical entry has a value less than the standard deviation of measurement for that particular variable.

INTERPOLATED DATA HEADINGS

(1) DEPTH	(2) TEMP	(3) SAL	(4) OXYGEN	(5) SGMT	(6) SOUND
(7) DELTA-D	(8) POT-EN	(9) SVA.			

- (1) DEPTH: Standard Oceanographic Depth in whole metres, as well as additional depths: 125, 175, 225, 3500, 4500, 5500, 6500, 7500, 8500, 9500.
- (2) TEMPERATURE: Interpolated value at standard depth, followed by the combined measurement and interpolation error estimate (see "INTRODUCTION" to section II of the data record).
- (3) SALINITY:
- A. The reported salinity values are measured to three decimal places.
 - (i) the interpolation error estimate is less than twice the standard deviation of measurement
 - the interpolated value is reported to three decimal places (e.g., 30.139).
 - (ii) the interpolation error estimate is equal to or greater than twice the standard deviation of measurement.
 - the interpolated value is reported to two decimal places, and followed by the interpolation error estimate (e.g., 29.23 C).
 - B. The reported salinity values are measured to two decimal places and followed by the measurement error estimate.
 - the interpolated value is reported to two decimal places, and followed by the combined measurement and interpolation error estimate (e.g., 30.59 B).
- (4) OXYGEN: Interpolated value at standard depth, followed by the combined measurement and interpolation error estimate (see "Introduction" to section II of the data record).

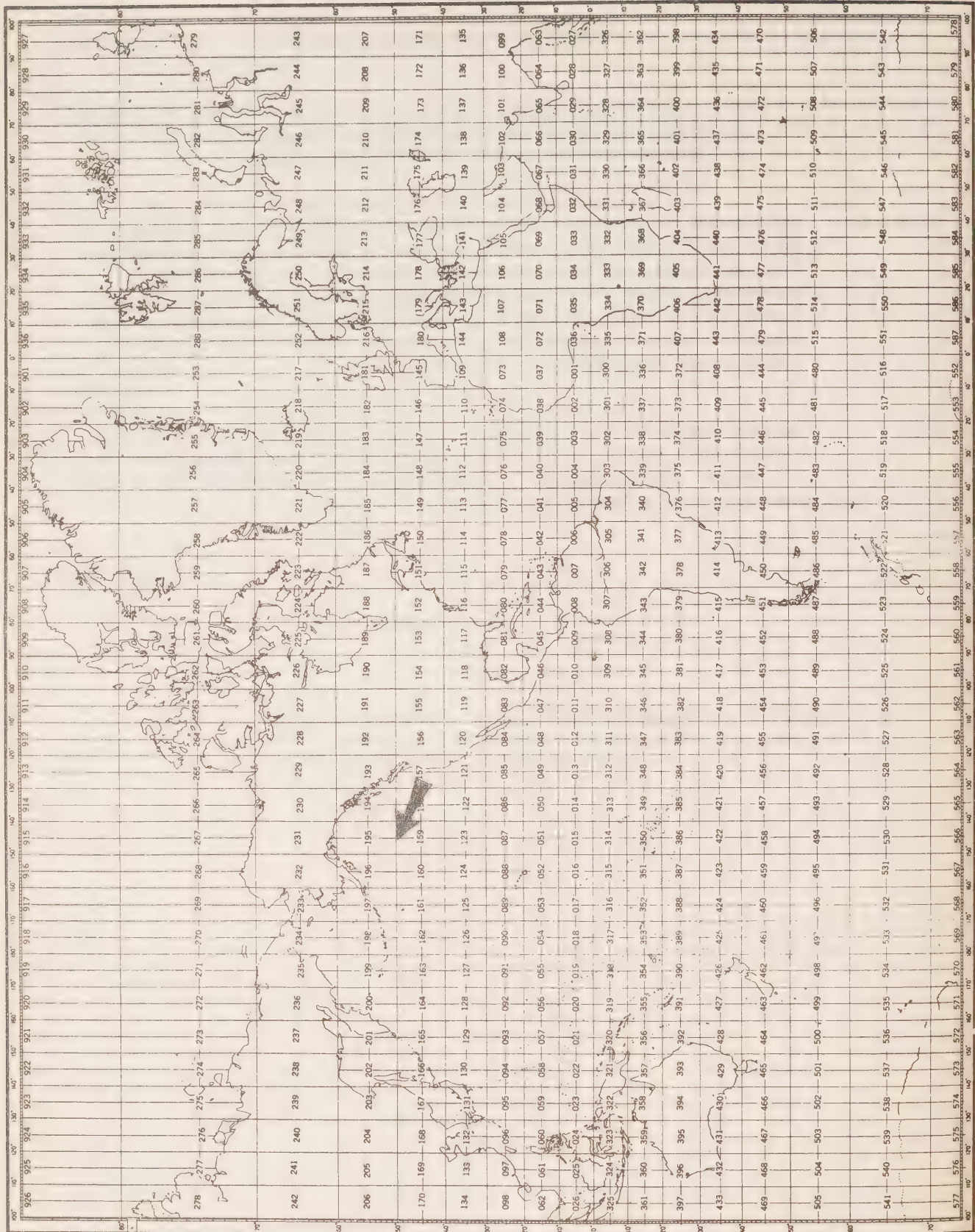
- (5) SIGMA-T: Computed from temperature and salinity values at standard oceanographic depth.
- (6) SOUND
VELOCITY: Computed from temperature, salinity and total pressure values at standard oceanographic depth, using Wilson's formula (1960).
- (7) DELTA-D: The geo-potential anomaly as defined by:
- $$\Delta D = \int_0^p \delta dp$$
- ΔD is expressed in dynamic metres (10^5 ergs/gram) and recorded to three decimal places (e.g., 2.345 dyn. metres).
- (8) POTENTIAL
ENERGY
ANOMALY: The Potential energy anomaly χ as defined by:
- $$\chi = \frac{1}{g} \int_0^p p \delta dp = \int_0^z \rho p \delta dz$$
- χ is expressed in units of 10^8 ergs/cm² and recorded to two decimal places (e.g., 116.44).
- (9) SPECIFIC
VOLUME
ANOMALY: The specific volume anomaly as defined by:
- $$\delta = \alpha - \alpha_{35.0.P}$$
- δ is expressed in ml/gr, and conventionally reported as $10^5 \delta$, to one decimal place (i.e., δ reported as 1234, reads 123.4, and corresponds to a specific volume anomaly of 0.001234 ml/gr.).

SPECIAL CHARACTERS

‡ (Record mark): is used to indicate inconsistencies which are printed in an area below the "Observed Data". A corresponding record mark at the extreme left hand side indicates the level at which the inconsistency occurs

* (Asterisk): this character may occur in the **interpolated** portion of the data record. It is printed at the extreme left hand side of the page, when three or more standard depth levels fall within any one **observed depth interval**. The **third**, and all consequent levels are preceded by the asterisk to indicate that more than **two** machine interpolations were carried out, utilizing the same set of interpolation parabolas. The asterisk will also appear when the last standard depth is an extrapolation and there are at least two interpolations between the last two observed depths.

Q: appears occasionally in this data record, preceding an observed oxygen value. This "questionable" indicator infers that the value does not fit the usual pattern of oxygen distribution. "The questionable" value could be due to a sampling error and, generally, is not a result of an error in determination.



MARSDEN SQUARE CHART

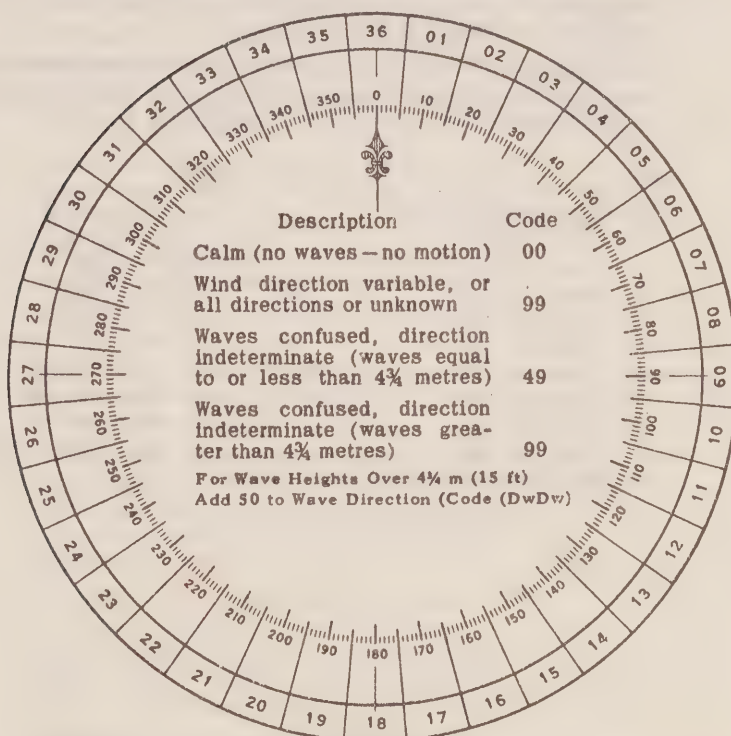
Table 1
CONVERSION
MINUTES TO $\frac{1}{10}$ HRS.

Minutes	Tenths Hrs.
00-03	0
04-08	1
09-15	2
16-20	3
21-27	4
28-32	5
33-39	6
40-44	7
45-51	8
52-56	9
57-59	0 (next HR.)

Table 2
WATER COLOR CODE
Based on Percentage Yellow

Code:	Description
00	Deep Blue
10	Blue
20	Greenish Blue
30	Bluish Green
40	Green
50	Light Green
60	Yellowish Green
70	Yellow Green
80	Green Yellow
90	Greenish Yellow
99	Yellow

Table 3. DIRECTION CODE (dd)



NOTE:

Always use the true direction from which the wind is blowing, or the direction from which Waves I (sea), or Waves II (swell) come.

Table 4. PERIOD OF THE WAVES (P_w)
(Measure to the Nearest Second)

Code:	Period in Seconds:	Code:	Period in Seconds:
2	5 sec. or less	8	16 or 17 sec.
3	6 or 7 sec.	9	18 or 19 sec.
4	8 or 9 sec.	0	20 or 21 sec.
5	10 or 11 sec.	1	Over 21 sec.
6	12 or 13 sec.	X	Calm, or period not determined
7	14 or 15 sec.		

Table 5. HEIGHT OF THE WAVES (H_w)

- The average value of the wave height (vertical distance between trough and crest) is reported, as obtained from the larger well formed waves of the wave system being observed.
- Each code figure provides for reporting a range of heights. For example: 1 = $\frac{1}{4}$ m (1 ft) to $\frac{3}{4}$ m ($2\frac{1}{2}$ ft); 5 = $2\frac{1}{4}$ m (7 ft) to $2\frac{3}{4}$ m (9 ft); 9 = $4\frac{1}{4}$ m ($13\frac{1}{2}$ ft) to $4\frac{3}{4}$ m (15 ft), etc.
- If a wave height comes exactly midway between the heights corresponding to two code figures, the lower code figure is reported; e.g. a height of $2\frac{3}{4}$ m is reported by code figure 5.

Code			Code
0	Less than ¼ m (1 ft)		0 5 m (16 ft)
1	½ m (1½ ft)		1 5½ m (17½ ft)
2	1 m (3 ft)		2 6 m (19 ft)
3	1½ m (5 ft)	Add	3 6½ m (21 ft)
4	2 m (6½ ft)	50	4 7 m (22½ ft)
5	2½ m (8 ft)	to	5 7½ m (24 ft)
6	3 m (9½ ft)	Dw Dw	6 8 m (25½ ft)
7	3½ m (11 ft)		7 8½ m (27 ft)
8	4 m (13 ft)		8 9 m (29 ft)
9	4½ m (14 ft)		9 9½ m (30½ ft) or more
x	Height not determined		

Add
50
to
Dw Dw

Table 6. WIND FORCE CODE

The Beaufort force of the wind is estimated from the appearance of the sea surface, according to the table below. This table is only intended as a guide to show roughly what may be expected on the open sea, remote from land. Factors which must be taken into account are the "lag" effect between the wind increasing and the sea getting up; and the influence of "fetch", depth, swell, heavy rain and tide effect on the appearance of the sea. Estimation of the wind force by this method becomes unreliable in shallow water or when close inshore, owing to the tidal effect and the shelter provided by the land.

Code	Appearance of sea if fetch and duration of the blow have been sufficient to develop the sea fully	Description
00	Sea like a mirror	Calm
01	Ripples with the appearance of scales are formed, but without foam crests.	Light Air
02	Small wavelets; crests have a glassy appearance and do not break.	Light Breeze
03	Large wavelets; crests begin to break; foam of glassy appearance; perhaps scattered white horses.	Gentle Breeze
04	Small waves, becoming longer; fairly frequent white horses.	Moderate breeze
05	Moderate waves; many white horses are formed (chance of some spray)	Fresh Breeze
06	Large waves; white foam crests everywhere (probably some spray)	Strong Breeze
07	Sea heaps up and white foam from breaking waves begins to be blown in streaks along the direction of the wind.	Near Gale
08	Moderately high waves; edges of crests begin to break into the spindrift; foam is blown in well-marked streaks along the direction of the wind.	Gale
09	High waves; dense streaks of foam along wind; crests begin to topple, tumble and roll over; spray may affect visibility.	Strong Gale
10	Very high waves with long overhanging crests; foam in great patches blown in dense white streaks along wind; sea surface takes a white appearance; tumbling becomes heavy and shock-like; visibility affected.	Storm
11	Exceptionally high waves (medium sized ships may be lost to view behind waves); sea covered with long white patches of foam lying along the wind; everywhere edges of crests are blown into froth; visibility affected.	Violent Storm
12	Air is filled with foam and spray; sea completely white with driving spray; visibility seriously affected.	Hurricane

Table 7. PRESENT WEATHER

W.W. CODE

NO PRECIPITATION ON STATION AT TIME OF OBSERVATION

Code figure ww			
No meteors except photometers	00	Cloud development not observed or not observable	characteristic change of the state of sky during the past hour
	01	Clouds generally dissolving or becoming less developed	
	02	State of sky on the whole unchanged	
Haze, dust, sand or smoke	03	Clouds generally forming or developing	
	04	Visibility reduced by smoke, e.g. veldt or forest fires, industrial smoke or volcanic ashes	
	05	Haze	
	06	Widespread dust in suspension in the air, not raised by wind at or near the station at the time of observation	
	07	Dust or sand raised by wind at or near the station at the time of observation, but no well developed dust whirl(s) or sand whirl(s), and no duststorm or sandstorm seen	
	08	Well developed dust whirl(s) or sand whirl(s) seen at or near the station during the preceding hour or at the time of observation, but no dustorm or sandstorm	
	09	Duststorm or sandstorm within sight at the time of observation, or at the station during the preceding hour	
	10	Mist	
	11	Patches of	shallow fog or ice fog at the station, whether on land or sea, not deeper than about 2 metres on land or 10 metres at sea
	12	More of less continuous	
	13	Lightning visible, no thunder heard	
	14	Precipitation within sight, not reaching the ground or the surface of the sea	
	15	Precipitation within sight, reaching the ground or the surface of the sea, but distant (i.e. estimated to be more than 5 km) from the station	
	16	Precipitation within sight, reaching the ground or the surface of the sea, near to, but not at the station	
	17	Thunderstorm, but no precepitation at the time of observation	
	18	Squalls	} at or within sight of the station during the preceding hour or at the time of observation
	19	Funnel clouds	
ww = 20 - 29			
	Precipitation, fog, ice fog or thunderstorm at the station during the preceding hour but not at the time of observation		
	20	Drizzle (not freezing) or snow grains	} not falling as shower(s)
	21	Rain (not freezing)	
	22	Snow	
	23	Rain and snow or ice pellets, type (a)	
	24	Freezing drizzle or freezing rain	
	25	Shower(s) of rain	
	26	Shower(s) of snow, or of rain and snow	
	27	Shower(s) of hail, or of rain and hail	
	28	Fog or ice fog	
	29	Thunderstorm (with or without precipitation)	
ww = 30 - 39			
	Duststorm, sandstorm, drifting or blowing snow		
	30		- has decreased during the preceding hour
	31	Slight or moderate duststorm or sandstorm	- no appreciable change during the preceding hour
	32		- has begun or has increased during the preceding hour
	33		- has decreased during the preceding hour
	34	Severe duststorm or sandstorm	- no appreciable change during the preceding hour
	35		- has begun or has increased during the preceding hour
	36	Slight or moderate blowing snow	} generally low (below eye level)
	37	Heavy drifting snow	
	38	Slight or moderate blowing snow	} generally high (above eye level)
	39	Heavy blowing snow	
ww = 40 - 49			
	Fog or ice fog at the time of observation		
	40	Fog or ice fog at a distance at the time of observation, but not at the station during the preceding hour, the fog or ice fog extending to a level above that of the observer	
	41	Fog or ice fog in patches	
	42	Fog or ice fog, sky visible	} has become thinner during the preceding hour
	43	Fog or ice fog, sky invisible	
	44	Fog or ice fog, sky visible	} no appreciable change during the preceding hour
	45	Fog or ice fog, sky invisible	
	46	Fog or ice fog, sky visible	} has begun or has become thicker during the preceding hour
	47	Fog or ice fog, sky invisible	
	48	Fog, depositing rime, sky visible	
	49	Fog, depositing rime, sky invisible	

NO PRECIPITATION ON STATION AT TIME OF OBSERVATION

PRECIPITATION ON STATION AT TIME OF OBSERVATION

ww = 50 - 59 Drizzle		ww = 80 - 99 Showery precipitation, or precipitation with current or recent thunderstorm		
50	Drizzle, not freezing, intermittent	}	80 Rain shower(s), slight	
51	Drizzle, not freezing, continuous		81 Rain shower(s), moderate or heavy	
52	Drizzle, not freezing, intermittent	}	82 Rain shower(s), violent	
53	Drizzle, not freezing, continuous		83 Shower(s) of rain and snow mixed, slight	
54	Drizzle, not freezing, intermittent	}	84 Shower(s) of rain and snow mixed, moderate or heavy	
55	Drizzle, not freezing, continuous		85 Snow shower(s), slight	
56	Drizzle, freezing, slight	}	86 Snow shower(s), moderate or heavy	
57	Drizzle, freezing, moderate or heavy (dense)		87 Shower(s) of snow pellets or ice pellets, type (b), with or without rain or rain and snow mixed	
58	Drizzle and rain, slight	}	88 or rain and snow mixed	
59	Drizzle and rain, moderate or heavy		89 Shower(s) of hail, with or without rain or rain and snow mixed, not associated with thunder	
ww = 60 - 69 Rain		}	90 - moderate or heavy	
60	Rain, not freezing, intermittent		91 Slight rain at time of observation	
61	Rain, not freezing, continuous	}	92 Moderate or heavy rain at time of observation	
62	Rain, not freezing, intermittent		93 Slight snow, or rain and snow mixed or hail at time of observation	
63	Rain, not freezing, continuous	}	94 Moderate or heavy snow, or rain and snow mixed or hail at time of observation	
64	Rain, not freezing, intermittent		95 Thunderstorm, slight or moderate, without hail, but with rain and/or snow at time of observation	
65	Rain, not freezing, continuous	}	96 Thunderstorm, slight or moderate, with hail at time of observation	
66	Rain, freezing, slight		97 Thunderstorm, heavy, without hail, but with rain and/or snow at time of observation	
67	Rain, freezing, moderate or heavy	}	98 Thunderstorm, combined with duststorm or sandstorm at time of observation	
68	Rain or drizzle and snow, slight		99 Thunderstorm, heavy, with hail at time of observation	
69	Rain or drizzle and snow, moderate or heavy			
70 - 79 Solid precipitation not in showers				
ww				
70	Intermittent fall of snow flakes	}		
71	Continuous fall of snow flakes			
72	Intermittent fall of snow flakes	}		
73	Continuous fall of snow flakes			
74	Intermittent fall of snow flakes	}		
75	Continuous fall of snow flakes			
76	Ice prisms (with or without fog)			
77	Snow grains (with or without fog)			
78	Isolated starlike snow crystals (with or without fog)			
79	Ice pellets, type (a)			

PRECIPITATION ON STATION AT TIME OF OBSERVATION

Table 8. CLOUD TYPE CODE

Code	Cloud Type	Code	Cloud Type
0	Cirrus Ci	5	Nimbostratus Ns
1	Cirrocumulus Cc	6	Stratocumulus Sc
2	Cirrostratus Cs	7	Stratus St
3	Alto cumulus Ac	8	Cumulus Cu
4	Altostratus As	9	Cumulonimbus Cb
X	Cloud not visible owing to darkness, fog, duststorm, sandstorm, or other analogous phenomena		

Table 9. CLOUD AMOUNT CODE

Code	Cloud Cover	Code	Cloud Cover
0	0	6	6 oktas
1	1 okta or less, but not zero	7	7 oktas or more, but not 8 oktas
2	2 oktas	8	8 oktas
3	3 oktas	9	Sky obscured, or cloud amount cannot be estimated
4	4 oktas		
5	5 oktas		

Note: 1 okta = $\frac{1}{8}$ of the sky covered

Table 10. VISIBILITY

Code	Estimate of hor. Visibility
0	Less than 50 metres (less than 55 yards)
1	50-200 metres (approx. 55-220 yards)
2	200-500 metres (approx. 220-550 yards)
3	500-1,000 metres (approx. 550 yards- $\frac{1}{2}$ n.m.)
4	1-2 km (approx. $\frac{1}{2}$ -1 n.m.)
5	2-4 km (approx. 1-2 n.m.)
6	4-10 km (approx. 2-6 n.m.)
7	10-20 km (approx. 6-12 n.m.)
8	20-50 km (approx. 12-30 n.m.)
9	50 km or more (30 n.m. or more)

Note: n.m. = nautical mile

Table 11

CCO Institute Code

01. Atlantic Oceanographic Group.
02. Pacific Oceanographic Group.
03. Biological Station, St. Andrews, N.B.
04. Arctic Biological Station, St. Anne de Bellevue, P.Q.
05. Biological Station, St. John's, Nfld.
06. Station de Biologie Marine, Grande Riviere, P.Q.
07. Canadian Hydrographic Service.
08. Naval Research Establishment, Dartmouth, N.S.
09. Pacific Naval Laboratory, Esquimalt, B.C.
10. Bedford Institute of Oceanography.
11. Polar Continental Shelf Project.
12. Great Lakes Institute.
13. Inland Region, Oceanographic Research, Ottawa.
14. Institute of Oceanography, Dalhousie University.

SECTION III

Serial oceanographic data

GENERAL INFORMATION

<u>Institute:</u>	Pacific Oceanographic Group Nanaimo, B. C.
<u>Observation Platform:</u>	CCGS "St. Catharines"
<u>Vessel's cruising speed:</u>	13 knots
<u>Total number of stations occupied:</u>	34
<u>Anemometer height above sea level:</u>	19 metres
<u>Water transparency</u>	Secchi Disc.
<u>Barometer readings</u>	Aneroid Barometer (corrected)
<u>Air temperature</u>	Sling Psychrometer
<u>Wet bulb temperature</u>	Sling Psychrometer
<u>Surface sea water temperature</u>	Bucket sample (deck thermometer)
<u>Depth to bottom</u>	U. S. Coast and Geodetic Survey Chart 8500

The following Standard Deviations were used to express both measurement and interpolation error estimates:

Temperature	0.02
Salinity	0.003
Oxygen	0.03

C-REF-NO 003	YR 1965	DEPTH 138	WAVES 1 1823	AIR T 08.8	VIS 7
CONS. NO 001	MONTH 4	MXSAMPD 01	WAVES 2 1833	WET B 07.7	STN 001
LAT 48-330N	DAY 17	NO.DPTH 8	WND-DIR 180	WW-CODE 02	
LON 125-330W	HR 01.2	W-COLOR	WND-SPD 07	CLD-TPE 2	
MARSD SQ 157	C/I 1802	W-TRNSP	BARO 1013.0	CLD-AMT 6	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
012	0000	084 B	32030		2491	14806
012	0010	0814	32051		2496	14798
012	0020	0788	32235		2514	14792
012	0029	0776	32413		2530	14791
012	0049	0767	32992		2577	14798
012	0074	0764 C	33362		2606	14806
012	0098	0754	33478		2617	14808
012	0123	0726 B	33657		2635	14803

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0840 B	32030		2491	14806	0000	00000	3054
0010	0814	32051		2496	14798	0030	00002	3003
0020	0788	32235		2514	14792	0060	00006	2832
0030	0775	3244 B		2532	14791	0087	00013	2662
0050	0767	33013		2578	14799	0137	00033	2228
0075	0764 C	33369		2607	14806	0189	00066	1963
0100	0751 B	3354 I		2622	14808	0237	00109	1820
0125	0723 B	3366 B		2636	14803	0281	00160	1697

C-REF-NO 003	YR 1965	DEPTH 128	WAVES 1 1823	AIR T 09.1	VIS 7
CONS. NO 002	MONTH 4	MXSAMPD 01	WAVES 2 18X3	WET B 08.8	STN 002
LAT 48-380N	DAY 17	NO.DPTH 7	WND-DIR 180	WW-CODE 03	
LON 126-000W	HR 03.5	W-COLOR	WND-SPD 07	CLD-TPE 3	
MARSD SQ 157	C/I 1802	W-TRNSP	BARO 1016.0	CLD-AMT 4	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
035	0000	084 B	31609		2458	14801
035	0010	0840	31604		2458	14802
035	0020	0840	31603		2457	14804
035	0030	0790	31733		2475	14788
035	0050	0753	32570		2546	14788
035	0075	0757 B	33281		2601	14803
035	0100	0724	33703		2639	14799

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0840 B	31609		2458	14801	0000	00000	3367
0010	0840	31604		2458	14802	0034	00002	3372
0020	0840	31603		2457	14804	0068	00007	3374
0030	0790	31733		2475	14788	0101	00015	3210
0050	0753	32570		2546	14788	0159	00038	2539
0075	0757 B	33281		2601	14802	0216	00074	2019
0100	0724	33703		2639	14799	0262	00115	1664

C-REF-NO 003	YR 1965	DEPTH C 1298	WAVES 1 1534	AIR T 09.4	VIS 6
CONS. NO 003	MONTH 4	MXSAMPD 12	WAVES 2 1647	WET B 08.8	STN 003
LAT 48-420N	DAY 17	NO.DPTH 19	WND-DIR 150	WW-CODE 02	
LON 126-400W	HR 06.2	W-COLOR	WND-SPD 08	CLD-TPE 2	
MARSD SQ 157	C/I 1802	W-TRNSP	BARO 1013.0	CLD-AMT 2	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
062	0000	086 B	31768		2467	14810
062	0010	0862	31721		2463	14812
062	0020	0850	31773		2469	14810
062	0030	0822	31917		2485	14803
062	0049	0750	32418		2534	14784
062	0074	0740 B	32510		2543	14786
062	0098	0774	33413		2609	14815
062	0123	0786	33716		2631	14827
062	0148	0768	33848		2644	14826
062	0172	0748	33898		2651	14823
062	0197	0727	33936		2657	14819
062	0246	0672	33959		2666	14806
062	0295	0644 B	34004		2673	14804
062	0393	0575 B	34058		2686	14793
067	0482	0524	34133		2698	14788
067	0581	0478 C	34186		2708	14786
067	0779	0418	34296		2723	14795
067	0976	0366	34385		2735	14807
067	1172	0321	34444		2744	14822

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0860 B	31768		2467	14810	0000	00000	3277
0010	0862	31721		2463	14812	0033	00002	3316
0020	0850	31773		2469	14810	0066	00007	3262
0030	0822	31917		2485	14802	0098	00015	3117
0050	0748	3242 C		2535	14784	0156	00038	2645
0075	0741 B	3255 C		2545	14787	0222	00080	2545
0100	0776	3345 B		2612	14816	0278	00129	1922
0125	0785	33731		2632	14827	0324	00182	1731
0150	0766	33854		2644	14826	0366	00241	1618
0175	0746	33903		2651	14823	0406	00308	1556
0200	0724	33938		2657	14819	0444	00382	1504
0225	0695	3395 B		2662	14812	0482	00463	1459
0250	0669	33962		2666	14806	0518	00552	1421
0300	0641 B	34007		2674	14803	0588	00749	1357
0400	0571 B	34064		2687	14792	0719	01217	1238
0500	0515	34144		2700	14787	0838	01764	1122
0600	0471 C	34197		2709	14786	0947	02380	1040

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0700	0439 B	34253		2717	14790	1049	03057	0970
0800	0412	34307		2724	14796	1144	03788	0908
1000	0360	34392		2737	14809	1317	05378	0801

C-REF-NO 003	YR 1965	DEPTH C 2935	WAVES 1 1823	AIR T 08.8	VIS 7
CONS. NO 004	MONTH 4	MXSAMPD 15	WAVES 2 1836	WET B 08.3	STN 006
LAT 49-020N	DAY 17	NO.DPTH 20	WND-DIR 180	WW-CODE 02	
LON 130-400W	HR 19.3	W-COLOR 40	WND-SPD 09	CLD-TPE 7	
MARSD SQ 158	C/I 1802	W-TRNSP 09	BARO 1008.0	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
193	0000	082 B	32075		2497	14799
193	0010	0805	32089		2501	14795
193	0020	0786	32491		2535	14794
193	0030	0768	32512		2539	14789
193	0050	0743	32621		2551	14784
193	0075	0699 B	32634		2558	14771
193	0100	0655	32873		2583	14761
193	0125	0647 C	33206		2610	14766
193	0150	0636	33516		2636	14770
193	0175	0616	33738		2656	14769
193	0200	0602	33818		2664	14769
193	0250	0550	33868		2674	14757
193	0299	0508	33897		2681	14748
193	0398	0458 B	33883		2686	14743
198	0494	0421	34057		2704	14746
198	0593	0414 B	34161		2713	14761
198	0789	0377	34321		2729	14780
198	0986	0332	34395		2739	14795
198	1184	0290	34453		2748	14811
198	1483	0244	34514		2757	14842

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0820 B	32075		2497	14799	0000	00000	2992
0010	0805	32089		2501	14795	0030	00002	2962
0020	0786	32491		2535	14794	0058	00006	2639
0030	0768	32512		2539	14789	0084	00013	2600
0050	0743	32621		2551	14784	0136	00033	2488
0075	0699 B	32634		2558	14771	0197	00073	2424
0100	0655	32873		2583	14761	0256	00125	2193
0125	0647 C	33206		2610	14766	0308	00184	1938
0150	0636	33516		2636	14770	0353	00248	1696
0175	0616	33738		2656	14769	0394	00315	1509
0200	0602	33818		2664	14769	0431	00387	1435
0225	0577	3385 B		2670	14763	0466	00464	1382
0250	0550	33868		2674	14757	0501	00548	1341
0300	0507	33897		2681	14748	0567	00733	1275
0400	0457 B	33886		2686	14743	0693	01188	1236
0500	0420	34065		2704	14747	0810	01722	1071

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0600	0413 B	34168		2713	14762	0914	02310	0995
0700	0396	34257		2722	14772	1011	02953	0918
0800	0375	34326		2730	14781	1100	03641	0850
1000	0329	34400		2740	14796	1263	05141	0760
1200	0288	34458		2748	14813	1409	06789	0684
1500	0242	34516		2757	14844	1605	09497	0605

C-REF-NO 003	YR 1965	DEPTH C 3273	WAVES 1 1823	AIR T 07.7	VIS 7
CONS. NO 005	MONTH 4	MXSAMPD 04	WAVES 2 1834	WET B 07.4	STN 007
LAT 49-100N	DAY 18	NO.DPTH 14	WND-DIR 180	WW-CODE 02	
LON 132-400W	HR 03.0	W-COLOR 10	WND-SPD 07	CLD-TPE 5	
MARSD SQ 158	C/I 1802	W-TRNSP 10	BARO 1008.0	CLD-AMT 6	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
030	0000	080 B	32580		2540	14798
030	0010	0770	32576		2544	14788
030	0020	0761	32579		2545	14786
030	0030	0726	32576		2550	14774
030	0050	0693	32571		2554	14764
030	0075	0599 B	32572		2566	14731
030	0100	0578	32702		2579	14728
030	0125	0604	33172		2613	14749
030	0150	0603	33611		2647	14758
030	0175	0580	33710		2658	14754
030	0200	0561	33783		2666	14752
030	0249	0523	33864		2677	14745
030	0299	0479	33890		2684	14736
030	0398	0418 B	33966		2697	14728

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0800 B	32580		2540	14798	0000	00000	2588
0010	0770	32576		2544	14788	0026	00001	2552
0020	0761	32579		2545	14786	0051	00005	2539
0030	0726	32576		2550	14774	0077	00012	2496
0050	0693	32571		2554	14764	0127	00032	2460
0075	0599 B	32572		2566	14731	0187	00071	2347
0100	0578	32702		2579	14728	0245	00122	2228
0125	0604	33172		2613	14749	0297	00182	1910
0150	0603	33611		2647	14758	0341	00243	1584
0175	0580	33710		2658	14754	0380	00308	1486
0200	0561	33783		2666	14752	0416	00378	1412
0225	0542	33833		2672	14749	0451	00454	1355
0250	0522	33865		2677	14745	0484	00536	1310
0300	0482	3391 D		2685	14737	0549	00717	1238
0400	0417 B	33967		2697	14728	0668	01144	1131

C-REF-NO 003	YR 1965	DEPTH C 3557	WAVES 1 0921	AIR T 08.3	VIS 6
CONS. NO 006	MONTH 4	MXSAMPD 04	WAVES 2 00X0	WET B 07.2	STN 008
LAT 49-170N	DAY 18	NO.DPTH 14	WND-DIR 090	WW-CODE 02	
LEN 134-400W	HR 09.6	W-COLOR	WND-SPD 04	CLD-TPE 7	
MARSD SQ 158	C/I 1802	W-TRNSP	BARO 1008.0	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
096	0000	073 B	32570		2549	14770
096	0010	0701	32564		2552	14761
096	0020	0667	32564		2557	14749
096	0030	0660	32560		2557	14748
096	0050	0651	32565		2559	14747
096	0075	0616	32591		2565	14738
096	0100	0590	32612		2570	14732
096	0125	0581 B	33111		2611	14739
096	0150	0567	33602		2651	14744
096	0175	0550	33738		2664	14743
096	0200	0531	33772		2669	14739
096	0250	0528	33886		2678	14748
096	0300	0486 B	33920		2686	14739
096	0400	0430 B	34001		2698	14734

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0730 B	32570		2549	14770	0000	00000	2502
0010	0701	32564		2552	14761	0025	00001	2470
0020	0667	32564		2557	14749	0050	00005	2429
0030	0660	32560		2557	14748	0074	00011	2424
0050	0651	32565		2559	14747	0123	00031	2412
0075	0616	32591		2565	14738	0183	00070	2353
0100	0590	32612		2570	14732	0241	00122	2309
0125	0581 B	33111		2611	14739	0295	00183	1928
0150	0567	33602		2651	14744	0338	00244	1548
0175	0550	33738		2664	14743	0376	00307	1429
0200	0531	33772		2669	14739	0411	00375	1384
0225	0529 B	3383 B		2674	14743	0446	00450	1342
0250	0528	33886		2678	14748	0479	00531	1301
0300	0486 B	33920		2686	14739	0543	00711	1233
0400	0430 B	34001		2698	14734	0662	01135	1120

C-REF-NO 003	YR 1965	DEPTH C 3767	WAVES 1 0721	AIR T 07.2	VIS 6
CONS. NO 007	MONTH 4	MXSAMPD 35	WAVES 2 3644	WET B 06.9	STN 009
LAT 49-260N	DAY 18	NO.DPTH 24	WND-DIR 080	WW-CODE 02	
LON 136-400W	HR 16.5	W-COLOR 10	WND-SPD 05	CLD-TPE 7	
MARSD SQ 158	C/I 1802	W-TRNSP 09	BARO 1006.0	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
165	0000	072 B	32596		2552	14767
165	0010	0706	32592		2554	14763
165	0020	0678	32592		2558	14753
165	0030	0670	32590		2558	14752
165	0050	0646	32577		2561	14745
165	0075	0639	32577		2561	14747
165	0100	0568	32627		2574	14723
165	0125	0580 C	33088		2609	14738
165	0150	0568	33495		2643	14743
165	0174	0554	33677		2659	14743
165	0199	0537	33769		2668	14742
165	0249	0501	33847		2678	14736
165	0299	0459	33883		2686	14727
165	0399	0413 B	33978		2698	14726
165	0498	0393	34084		2709	14735
165	0598	0379 C	34190		2719	14747
172	0783	0348	34306		2731	14767
172	0981	0310	34383		2741	14784
172	1180	0272	34438		2748	14802
172	1479	0233	34506		2757	14836
172	1975	0192 B	34587		2767	14904
172	2471	0171	34635		2772	14980
172	2968		34656			
172	3466	0156	34674		2777	15147

I N T E R * P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0720 B	32596		2552	14767	0000	00000	2470
0010	0706	32592		2554	14763	0025	00001	2456
0020	0678	32592		2558	14753	0049	00005	2422
0030	0670	32590		2558	14752	0074	00011	2414
0050	0646	32577		2561	14745	0122	00031	2397
0075	0639	32577		2561	14747	0182	00070	2391
0100	0568	32627		2574	14723	0241	00122	2272
0125	0580 C	33088		2609	14738	0294	00183	1944
0150	0568	33495		2643	14743	0339	00246	1629
0175	0553	33682		2659	14743	0378	00311	1475
0200	0536	33771		2668	14741	0414	00380	1391
0225	0519	3382 B		2674	14739	0449	00455	1337

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0250	0500	33848		2678	14736	0482	00536	1298
0300	0458	33884		2686	14727	0546	00716	1229
0400	0413 B	33979		2698	14726	0664	01138	1118
0500	0393	34086		2709	14736	0772	01636	1024
0600	0379 C	34192		2719	14748	0871	02194	0939
0700	0363 B	34263		2726	14758	0963	02806	0876
0800	0345	34314		2732	14768	1049	03469	0826
1000	0306	34389		2741	14786	1208	04930	0742
1200	0269	34443		2749	14804	1351	06547	0673
1500	0231	34510		2758	14839	1544	09215	0597
2000	0191 B	34590		2767	14908	1826	14244	0512
2500	0167 B	34637		2773	14984	2076	20009	0467
3000	0155	34661		2776	15065	2309	26640	0449
3500	0157	34674		2777	15153	2540	34426	0456

C-REF-NO 003	YR 1965	DEPTH C 3886	WAVES 1 0222	AIR T 08.3	VIS 7
CONS. NO 008	MONTH 4	MXSAMPD 04	WAVES 2 0223	WET B 07.2	STN 010
LAT 49-340N	DAY 19	NO.DPTH 14	WND-DIR 020	WW-CODE 02	
LON 139-400W	HR 00.7	W-COLOR 10	WND-SPD 08	CLD-TPE 7	
MARSD SQ 158	C/I 1802	W-TRNSP 14	BARO 1007.0	CLD-AMT 6	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
007	0000	068 B	32651		2562	14752
007	0010	0661	32649		2564	14746
007	0020	0651	32647		2565	14743
007	0030	0628	32645		2568	14736
007	0050	0616	32644		2570	14734
007	0075	0606 B	32654		2572	14734
007	0099	0537	32743		2587	14712
007	0124	0549 B	33089		2613	14725
007	0149	0535	33467		2644	14729
007	0174	0517	33701		2665	14728
007	0199	0490	33748		2672	14722
007	0249	0454	33803		2680	14716
007	0298	0425	33864		2688	14713
007	0398	0396 B	33976		2700	14719

TIME-DISTANCE CHECK FAILED

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0680 B	32651		2562	14752	0000	00000	2378
0010	0661	32649		2564	14746	0024	00001	2357
0020	0651	32647		2565	14743	0047	00005	2347
0030	0628	32645		2568	14736	0071	00011	2322
0050	0616	32644		2570	14734	0118	00030	2311
0075	0606 B	32654		2572	14734	0176	00067	2294
0100	0537	32754		2588	14712	0231	00117	2142
0125	0549 B	33105		2614	14725	0282	00175	1895
0150	0534	33480		2645	14729	0326	00237	1601
0175	0516	33705		2665	14728	0364	00300	1415
0200	0489	33749		2672	14722	0399	00367	1354
0225	0469	33779		2676	14718	0433	00440	1312
0250	0453	33804		2680	14716	0465	00520	1278
0300	0425	33863		2688	14713	0528	00696	1208
0400	0396 B	33978		2700	14719	0645	01112	1100

C-REF NO 003	YR 1965	DEPTH C 3877	WAVES 1 0322	AIR T 07.7	VIS 6
CONS. NO 009	MONTH 4	MXSAMPD 15	WAVES 2 0334	WET B 06.6	STN 011
LAT 49 41N	DAY 19	NO.DPTH 20	WND-DIR 030	WW-CODE 02	
LON 140-400W	HR 07.4	W-COLOR	WND-SPD 05	CLD-TPE 7	
MARSD SQ 159	C/I 1802	W-TRNSP	BARO 1010.0	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
074	0000	067 B	32722		2569	14749
074	0010	0658	32720		2570	14746
074	0020	0657	32721		2570	14747
074	0030	0640	32724		2573	14742
074	0050	0590	32725		2579	14725
074	0075	0584 B	32723		2580	14726
074	0100	0497	32768		2593	14696
074	0125	0510 B	33053		2614	14709
074	0150	0510	33554		2654	14720
074	0175	0488	33709		2669	14717
074	0200	0473	33756		2674	14715
074	0250	0448	33825		2682	14714
074	0300	0426	33879		2689	14714
074	0400	0373 B	33968		2702	14709
079	0500	0368	34087		2711	14725
079	0600	0362 B	34178		2719	14740
079	0800	0329	34296		2732	14761
079	1000	0296	34380		2742	14782
079	1200	0264	34444		2750	14802
079	1500	0230	34514		2758	14839

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0670 B	32722		2569	14749	0000	00000	2312
0010	0658	32720		2570	14746	0023	00001	2300
0020	0657	32721		2570	14747	0046	00005	2299
0030	0640	32724		2573	14742	0069	00011	2277
0050	0590	32725		2579	14725	0115	00029	2219
0075	0584 B	32723		2580	14726	0170	00065	2217
0100	0497	32768		2593	14696	0225	00113	2088
0125	0510 B	33053		2614	14709	0275	00171	1891
0150	0510	33554		2654	14720	0318	00231	1518
0175	0488	33709		2669	14717	0354	00292	1380
0200	0473	33756		2674	14715	0388	00357	1331
0225	0460	33794		2679	14714	0421	00429	1291
0250	0448	33825		2682	14714	0453	00508	1257
0300	0426	33879		2689	14714	0515	00682	1198
0400	0373 B	33968		2702	14709	0631	01093	1084
0500	0368	34087		2711	14725	0736	01577	0998

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0600	0362 B	34178		2719	14740	0833	02126	0931
0700	0347 B	34244		2726	14752	0924	02734	0873
0800	0329	34296		2732	14761	1010	03394	0823
1000	0296	34380		2742	14782	1168	04847	0738
1200	0264	34444		2750	14802	1310	06452	0667
1500	0230	34514		2758	14839	1502	09100	0593

C-REF-NO 003	YR 1965	DEPTH C 3913	WAVES 1 0222	AIR T 06.1	VIS 8
CONS. NO 010	MONTH 4	MXSAMPD 04	WAVES 2 3643	WET B 05.5	STN 012
LAT 49-490N	DAY 19	NO.DPTH 14	WND-DIR 040	WW-CODE 02	
LON 142-400W	HR 17.3	W-COLOR 10	WND-SPD 05	CLD-TPE 4	
MARSD SQ 159	C/I 1802	W-TRNSP 15	BARO 1008.0	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
173	0000	059 B	32724		2579	14717
173	0010	0578 B	32722		2580	14713
173	0020	0580	32719		2580	14716
173	0030	0574	32720		2581	14715
173	0050	0558	32721		2583	14712
173	0075	0529 B	32731		2587	14704
173	0099	0486	32761		2594	14691
173	0124	0446 B	32896		2609	14680
173	0149	0475	33195		2630	14700
173	0174	0424	33536		2662	14688
173	0199	0410	33678		2675	14688
173	0248	0368	33744		2684	14679
173	0298	0360	33814		2691	14685
173	0397	0363	33985		2704	14705

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0590 B	32724		2579	14717	0000	00000	2214
0010	0578 B	32722		2580	14713	0022	00001	2203
0020	0580	32719		2580	14716	0044	00005	2209
0030	0574	32720		2581	14715	0067	00010	2202
0050	0558	32721		2583	14712	0111	00028	2185
0075	0529 B	32731		2587	14704	0165	00063	2148
0100	0484	32764		2595	14690	0218	00111	2077
0125	0447 B	32906		2610	14681	0269	00169	1934
0150	0473	33210		2631	14700	0315	00234	1736
0175	0423	33544		2663	14687	0355	00300	1435
0200	0409	33681		2675	14687	0390	00367	1320
0225	0387	3373 D		2681	14683	0422	00437	1262
0250	0367	33747		2684	14679	0454	00514	1232
0300	0352 C	33819		2692	14682	0514	00685	1167
0400	0364	33991		2704	14706	0627	01085	1058

C-REF-NO 003	YR 1965	DEPTH C 4206	WAVES 1 2724	AIR T 06.1	VIS 7
CONS. NO 011	MONTH 4	MXSAMPD 42	WAVES 2 2733	WET B 04.9	STN 201
LAT 50-000N	DAY 20	NO.DPTH 26	WND-DIR 270	WW-CODE 03	
LON 145-000W	HR 19.0	W-COLOR 10	WND-SPD 09	CLD-TPE 1	
MARSD SQ 195	C/I 1802	W-TRNSP 14	BARO 1004.0	CLD-AMT 3	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
190	0000	061 B	32709		2575	14725
190	0010	0582 B	32704		2578	14715
190	0020	0581	32708		2579	14716
190	0030	0579	32709		2579	14717
190	0049	0565	32708		2581	14714
190	0074	0513 B	32715		2587	14697
190	0099	0461	32745		2595	14680
190	0124	0424	32807		2604	14670
190	0148	0402	33199		2638	14669
190	0173	0354	33536		2669	14658
190	0198	0325	33650		2681	14651
190	0247	0329	33764		2690	14662
190	0297	0343	33865		2696	14678
190	0396	0353	34010		2707	14701
190	0495	0349	34131		2717	14717
190	0595	0338	34217		2725	14730
198	0796	0312 B	34317		2735	14754
198	0996	0280	34398		2744	14774
198	1195	0260	34449		2750	14800
198	1495	0229 B	34518		2758	14838
198	1989	0194	34591		2767	14907
198	2488	0171 B	34635		2772	14983
198	2991	0158 B	34661		2775	15065
198	3486	0152	34677		2777	15149
198	3987	0151 B	34683		2778	15236
198	4188	0151	34687		2778	15272

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0610 B	32709		2575	14725	0000	00000	2249
0010	0582 B	32704		2578	14715	0022	00001	2221
0020	0581	32708		2579	14716	0045	00005	2218
0030	0579	32709		2579	14717	0067	00010	2216
0050	0563	32708		2581	14714	0112	00029	2201
0075	0511 B	32716		2588	14696	0166	00063	2140
0100	0459	32744		2596	14679	0219	00111	2066
0125	0423	32821		2605	14670	0270	00169	1974
0150	0398	33231		2641	14669	0316	00233	1642
0175	0351	33550		2670	14657	0353	00296	1359

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0200	0324	33656		2681	14651	0386	00359	1256
0225	0322 B	3372 B		2687	14655	0417	00427	1205
0250	0330	33771		2690	14663	0447	00500	1178
0300	0344	33870		2697	14679	0505	00663	1120
0400	0353	34015		2707	14701	0614	01051	1028
0500	0349	34136		2717	14718	0713	01508	0941
0600	0337	34220		2725	14730	0805	02024	0874
0700	0325	34276		2731	14743	0891	02597	0826
0800	0311 B	34319		2735	14754	0972	03225	0787
1000	0280	34399		2745	14775	1123	04616	0706
1200	0259	34450		2750	14800	1261	06174	0657
1500	0229 B	34519		2759	14838	1451	08793	0588
2000	0193	34592		2767	14909	1731	13797	0514
2500	0171 B	34636		2772	14985	1982	19604	0472
3000	0158 B	34661		2775	15066	2218	26299	0452
3500	0152	34677		2777	15151	2448	34033	0447
4000	0151	34685		2778	15239	2679	43007	0454

C-REF-NO 003 YR 1965 DEPTH C 4206 WAVES 1 1021 AIR T 04.9 VIS 7
 CONS. NO 012 MONTH 4 MXSAMPD 02 WAVES 2 3244 WET B 02.2 STN 202
 LAT 49-540N DAY 23 NO.DPTH 12 WND-DIR 100 WW-CODE 02
 LON 144-530W HR 18.9 W-COLOR 10 WND-SPD 01 CLD-TPE 8
 MARSD SQ 159 C/I 1802 W-TRNSP 18 BARO 1008.0 CLD-AMT 4 HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
189	0000	061 B	32705		2575	14724
189	0010	0607	32701		2575	14725
189	0020	0606	32702		2575	14726
189	0030	0595	32698		2576	14723
189	0050	0594	32700		2577	14726
189	0075	0564	32704		2581	14718
189	0100	0502	32725		2589	14697
189	0125	0454 B	32763		2598	14682
189	0150	0448	33197		2633	14689
189	0175	0384	33470		2661	14670
189	0200	0347	33632		2677	14661
189	0250	0349	33760		2687	14671

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0610 B	32705		2575	14724	0000	00000	2252
0010	0607	32701		2575	14725	0023	00001	2253
0020	0606	32702		2575	14726	0045	00005	2252
0030	0595	32698		2576	14723	0068	00010	2243
0050	0594	32700		2577	14726	0113	00029	2243
0075	0564	32704		2581	14718	0169	00065	2208
0100	0502	32725		2589	14697	0224	00114	2125
0125	0454 B	32763		2598	14682	0276	00174	2048
0150	0448	33197		2633	14689	0324	00241	1719
0175	0384	33470		2661	14670	0364	00307	1451
0200	0347	33632		2677	14661	0398	00373	1295
0225	0335	3374 B		2687	14661	0430	00442	1202
0250	0349	33760		2687	14671	0460	00516	1205

C-REF-NO 003	YR 1965	DEPTH C 4206	WAVES 1 1621	AIR T 03.3	VIS 7
CONS. NO 013	MONTH 4	MXSAMPD 20	WAVES 2 1645	WET B 03.0	STN 203
LAT 50-050N	DAY 28	NO.DPTH 21	WND-DIR 160	WW-CODE 18	
LON 145-080W	HR 18.9	W-COLOR 10	WND-SPD 01	CLD-TPE 5	
MARSD SQ 195	C/I 1802	W-TRNSP 14	BARO 1010.2	CLD-AMT 7	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
189	0000	055 B	32706	759 B	2582	14700
189	0010	0535 B	32712	759 B	2585	14696
189	0020	0534	32715	760 B	2585	14697
189	0030	0534	32715	759 B	2585	14699
189	0050	0534	32716	760 B	2585	14702
189	0075	0534	32720	733 B	2585	14706
189	0100	0495	32727	726	2590	14694
189	0125	0426 B	32785	730	2602	14670
189	0150	0394	33186	583 B	2637	14666
189	0175	0331	33539	402 B	2671	14648
189	0200	0316	33680	310 B	2684	14648
189	0250	0330	33805	198 B	2693	14664
189	0300	0343	33919	114 B	2701	14679
189	0400	0350 B	34053	079 B	2711	14700
195	0497	0350	34153	065	2718	14718
195	0599	0338 B	34221	066	2725	14731
195	0800	0308	34336	065 B	2737	14753
195	1000	0290 B		Q081		
195	1185	0264	34457	061	2751	14800
195	1488	0227	34522	081 B	2759	14836
195	1995	0193 B	34598	150 B	2768	14908

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0550 B	32706	759 B	2582	14700	0000	00000	2183
0010	0535 B	32712	759 B	2585	14696	0022	00001	2163
0020	0534	32715	760 B	2585	14697	0044	00004	2160
0030	0534	32715	759 B	2585	14699	0065	00010	2161
0050	0534	32716	760 B	2585	14702	0109	00028	2162
0075	0534	32720	733 B	2585	14706	0163	00063	2162
0100	0495	32727	726	2590	14694	0217	00111	2116
0125	0426 B	32785	730	2602	14670	0269	00171	2003
0150	0394	33186	583 B	2637	14666	0315	00236	1672
0175	0331	33539	402 B	2671	14648	0353	00298	1349
0200	0316	33680	310 B	2684	14648	0386	00361	1231
0225	0319 B	3376 C	246 B	2690	14655	0416	00427	1178
0250	0330	33805	198 B	2693	14664	0446	00499	1153
0300	0343	33919	114 B	2701	14679	0502	00657	1083
0400	0350 B	34053	079 B	2711	14700	0607	01033	0997

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0500	0350	34155	065	2719	14718	0704	01480	0928
0600	0338 B	34222	066	2725	14731	0795	01993	0873
0700	0323 B	34283	065	2731	14742	0881	02563	0819
0800	0308	34336	065 B	2737	14753	0961	03182	0770
1000	0290 B	3441 B	081	2745	14779	1111	04562	0709
1200	0262	34461	061	2751	14801	1249	06119	0652
1500	0227	34527	072 C	2759	14838	1436	08709	0580
2000	0193 B	34598	151 B	2768	14909	1713	13654	0509

C-REF-NO 003	YR 1965	DEPTH C 4206	WAVES 1 3123	AIR T 04.4	VIS 9
CONS. NO 014	MONTH 4	MXSAMPD 04	WAVES 2 3133	WET B 02.2	STN 204
LAT 49-580N	DAY 30	NO.DPTH 15	WND-DIR 310	WW-CODE 03	
LON 144-550W	HR 19.0	W-COLOR 30	WND-SPD 08	CLD-TPE 7	
MARSD SQ 159	C/I 1802	W-TRNSP 12	BARO 1028.2	CLD-AMT 7	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
190	0000	060 B	32706	734 B	2576	14720
190	0003	0600	32703	730 B	2576	14721
190	0010	0600	32702	736 B	2576	14722
190	0020	0598	32701	736 B	2576	14723
190	0030	0598	32700	730 B	2576	14724
190	0050	0598 B	32704	735 B	2577	14728
190	0075	0588	32704	733 B	2578	14728
190	0100	0503 B	32749	724 B	2591	14698
190	0125	0458	32810	719	2601	14684
197	0147	0425	33190	596 B	2635	14679
197	0171	0400	33503	489 B	2662	14677
197	0196	0370	33633	415 B	2675	14670
197	0245	0322	33723	276 B	2687	14658
197	0294	0333 B	33839	167 B	2695	14673
197	0392	0353	34005	104 B	2706	14700

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0600 B	32706	734 B	2576	14720	0000	00000	2240
0010	0600	32702	736 B	2576	14722	0023	00001	2244
0020	0598	32701	736 B	2576	14723	0045	00005	2243
0030	0598	32700	730 B	2576	14724	0068	00010	2245
0050	0598 B	32704	735 B	2577	14728	0113	00029	2244
0075	0588	32704	733 B	2578	14728	0169	00065	2235
0100	0503 B	32749	724 B	2591	14698	0224	00114	2109
0125	0458	32810	719	2601	14684	0276	00174	2017
0150	0422	33237	581 B	2639	14679	0322	00239	1661
0175	0395	33532	476 B	2665	14676	0361	00303	1415
0200	0365	33644	403 B	2677	14668	0395	00369	1303
0225	0337	3370 C	330 B	2683	14661	0427	00438	1238
0250	0322	33735	263 B	2688	14659	0458	00513	1198
0300	0318 E	3384 C	163 B	2696	14667	0516	00678	1119
0400	0360	34019 •	106 B	2707	14704	0625	01066	1032

C-REF-NO 003	YR 1965	DEPTH C 4206	WAVES 1 2034	AIR T 06.9	VIS 3
CONS. NO 015	MONTH 5	MXSAMPD 02	WAVES 2 2934	WET B 06.9	STN 205
LAT 50-060N	DAY 05	NO.DPTH 11	WND-DIR 200	W-CODE 45	
LON 144-500W	HR 19.7	W-COLOR	WND-SPD 10	CLD-TPE X	
MARKSD SQ 195	C/I 1802	W-TRNSP	BARO 1021.0	CLD-AMT 9	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
197	0000	059 B	32700	730 B	2577	14716
197	0003	0565	32698	730 B	2580	14707
197	0010	0565 B	32701	739 B	2580	14708
197	0019	0568	32700	736 B	2580	14710
197	0029	0564 B	32702	735 B	2580	14711
197	0048	0564	32703	732 B	2581	14714
197	0073	0569	32699	735 B	2580	14720
197	0097	0502 B	32718	727 B	2589	14696
197	0121	0448	32771	720 B	2599	14679
197	0145	0419	33101	614 B	2628	14675
197	0169	0383	33520	466 B	2665	14669

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0590 B	32700	730 B	2577	14716	0000	00000	2232
0010	0565 B	32701	739 B	2580	14708	0022	00001	2204
0020	0568	32700	736 B	2580	14711	0045	00005	2209
0030	0564 B	32702	735 B	2581	14711	0067	00010	2204
0050	0566	32702	732 B	2580	14715	0111	00028	2208
0075	0565	32700	735 B	2580	14718	0167	00064	2212
0100	0494 B	3272 B	729 B	2590	14694	0221	00113	2124
0125	0443	3281 B	707 B	2603	14678	0273	00173	1999
0150	0407 B	3315 F	597 B	2633	14671	0320	00238	1713

C-REF-NO 003	YR 1965	DEPTH C 4206	WAVES 1 2624	AIR T 05.5	VIS 7
CONS. NO 016	MONTH 5	MXSAMPD 41	WAVES 2 2634	WET B 03.8	STN 206
LAT 50-000N	DAY 07	NO.DPTH 26	WND-DIR 260	HW-CODE 80	
LON 145-020W	HR 19.0	W-COLOR 10	WND-SPD 07	CLD-TPE 6	
MARSD SQ 195	C/I 1802	W-TRNSP 14	BARO 1024.2	CLD-AMT 7	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
190	0000	061 B	32700	739 B	2575	14724
190	0010	0600	32695	737 B	2576	14722
190	0020	0600	32692	738 B	2575	14724
190	0030	0589 B	32693	731 B	2577	14721
190	0050	0575	32697	732 B	2579	14718
190	0075	0566	32705	732 B	2580	14719
190	0099	0502 B	32725	729 B	2589	14697
190	0124	0459 B	32863	695 B	2605	14685
190	0149	0406	33269	566 B	2643	14672
190	0174	0346	33565	433 B	2672	14655
190	0199	0339	33660	367	2680	14657
190	0249	0350	33772	256 B	2688	14672
190	0298	0344	33845	178 B	2695	14678
190	0398	0351	33992	090 B	2706	14700
190	0497	0352 B	34110	068 B	2715	14718
190	0597	0339	34211	068 B	2724	14731
200	0784	0315	34303	063 B	2734	14753
200	0979	0291	34380	060 B	2742	14776
200	1176	0266	34440	063 B	2749	14799
200	1470	0233	34511	073 B	2758	14835
200	1963	0195	34585	133 B	2766	14903
200	2457	0173	34630	200	2772	14979
200	2950	0159 B	34659	257	2775	15058
200	3444	0153	34675	289	2777	15142
200	3939	0151 B	34682	327	2778	15228
200	4138	0152	34685	338	2778	15264

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0610 B	32700	739 B	2575	14724	0000	00000	2256
0010	0600	32695	737 B	2576	14722	0023	00001	2249
0020	0600	32692	738 B	2575	14724	0045	00005	2252
0030	0589 B	32693	731 B	2577	14721	0068	00010	2240
0050	0575	32697	732 B	2579	14718	0113	00029	2223
0075	0566	32705	732 B	2580	14719	0169	00065	2209
0100	0500 B	32727	729 B	2590	14696	0223	00113	2122
0125	0457 B	32878	691 B	2606	14684	0275	00173	1965
0150	0403	33284	560 B	2644	14671	0320	00235	1608
0175	0345	33571	430 B	2673	14655	0357	00297	1338

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0200	0339	33663	364	2681	14658	0389	00360	1265
0225	0344	33727	306	2685	14665	0421	00428	1223
0250	0350	33774	254 B	2688	14672	0451	00503	1195
0300	0344	33848	175 B	2695	14679	0510	00668	1137
0400	0351	33995	089 B	2706	14700	0620	01061	1042
0500	0352 B	34113	068 B	2715	14719	0721	01527	0961
0600	0339	34213	068 B	2724	14731	0814	02050	0880
0700	0326	3427 B	066 B	2730	14743	0901	02627	0831
0800	0313	34310	063 B	2734	14755	0983	03260	0795
1000	0288	34387	060 B	2743	14778	1137	04677	0724
1200	0263	34447	063 B	2750	14802	1277	06263	0664
1500	0230	34517	076 B	2758	14839	1468	08902	0591
2000	0193	34589	138 B	2767	14909	1749	13928	0516
2500	0171	34633	206	2772	14985	2002	19765	0475
3000	0158 B	34661	261	2775	15066	2239	26484	0453
3500	0153	34676	294	2777	15151	2469	34239	0449
4000	0151	34684	329	2778	15239	2701	43247	0455

C-REF-NO 003	YR 1965	DEPTH C 4206	WAVES 1 0423	AIR T 04.9	VIS 8
CONS. NO 017	MONTH 5	MXSAMPD 04	WAVES 2 0433	WET B 03.3	STN 207
LAT 49-550N	DAY 10	NO.DPTH 15	WND-DIR 040	HW-CODE 15	
LON 145-000W	HR 19.0	W-COLOR 10	WND-SPD 06	CLD-TPE 6	
MARSD SQ 159	C/I 1802	W-TRNSP 12	BARO 1023.0	CLD-AMT 6	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
190	0000	061 B	32686	730 B	2574	14724
190	0003	0599	32684	737 B	2575	14720
190	0010	0600	32685	736 B	2575	14722
190	0020	0600 B	32686	729 B	2575	14723
190	0029	0599	32683	734 B	2575	14724
190	0049	0581	32697	732 B	2578	14721
190	0073	0562 B	32702	733 B	2581	14717
190	0098	0513 B	32701	722 B	2586	14701
190	0122	0448	32848	702 B	2605	14680
190	0147	0397	33224	565 B	2640	14668
190	0171	0324	33571	Q388 B	2675	14645
190	0195	0318	33646	Q334 B	2681	14647
190	0244	0329	33793	192 B	2692	14662
190	0293	0343	33884	130 B	2698	14678
190	0391	0353	34012	097 B	2707	14700

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0610 B	32686	730 B	2574	14724	0000	00000	2266
0010	0600	32685	736 B	2575	14722	0023	00001	2256
0020	0600 B	32686	729 B	2575	14723	0045	00005	2257
0030	0598	32683	734 B	2575	14724	0068	00010	2258
0050	0580	32697	732 B	2578	14721	0113	00029	2229
0075	0559 B	32699	733 B	2581	14716	0169	00065	2206
0100	0508 B	32706	723 B	2587	14699	0224	00114	2145
0125	0442	3289 B	690 B	2609	14678	0275	00173	1943
0150	0387	3328 B	541 B	2645	14664	0320	00235	1598
0175	0320	3359 B	375 B	2677	14644	0356	00296	1298
0200	0318	33662	319 B	2682	14649	0389	00357	1246
0225	0323	33740	245 B	2688	14656	0419	00424	1193
0250	0331	33806	181 B	2693	14664	0449	00496	1153
0300	0342	3391 B	110 C	2700	14679	0505	00656	1092
0400	0354	34016 •	105 B	2707	14702	0612	01039	1028

C-REF-NO 003	YR 1965	DEPTH C 4206	WAVES 1 3011	AIR T 05.5	VIS 8
CONS. NO 018	MONTH 5	MXSAMPD 20	WAVES 2 3243	WET B .03.8	STN 208
LAT 49-550N	DAY 12	NO.DPTH 21	WND-DIR 300	WW-CODE 02	
LON 144-560W	HR 19.4	W-COLOR 10	WND-SPD 02	CLD-TPE 4	
MARSD SQ 159	C/I 1802	W-TRNSP 14	BARO 1024.0	CLD-AMT 7	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
194	0000	062 B	32695	719 B	2573	14728
194	0010	0603	32688	721 B	2575	14723
194	0020	0602	32687	718 B	2575	14724
194	0030	0599 B	32689	720 B	2575	14725
194	0050	0573	32700	721 B	2579	14718
194	0075	0560	32704	715 B	2581	14716
194	0100	0497 B	32749	700 B	2592	14695
194	0125	0457 B	32975	642 B	2614	14686
194	0150	0386	33306	528 B	2648	14664
194	0175	0346	33517	423 B	2668	14654
194	0200	0317	33662	323 B	2683	14648
194	0250	0330	33754	251 B	2689	14663
194	0300	0352	33865	171 B	2695	14682
194	0400	0353	34015	096 B	2707	14701
200	0499	0350	34120	061	2716	14718
200	0599	0344	34197	064 B	2723	14733
200	0799	0315	34319	060 B	2735	14755
200	0998	0284	34401	058 B	2744	14776
200	1197	0258	34457	058 B	2751	14799
200	1495	0228	34519	074 B	2759	14837
200	1993	0195	34587	132 B	2767	14908

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0620 B	32695	719 B	2573	14728	0000	00000	2271
0010	0603	32688	721 B	2575	14723	0023	00001	2258
0020	0602	32687	718 B	2575	14724	0046	00005	2258
0030	0599 B	32689	720 B	2575	14725	0068	00010	2254
0050	0573	32700	721 B	2579	14718	0113	00029	2218
0075	0560	32704	715 B	2581	14716	0169	00065	2203
0100	0497 B	32749	700 B	2592	14695	0223	00113	2102
0125	0457 B	32975	642 B	2614	14686	0273	00171	1892
0150	0386	33306	528 B	2648	14664	0317	00232	1574
0175	0346	33517	423 B	2668	14654	0354	00294	1379
0200	0317	33662	323 B	2683	14648	0387	00357	1245
0225	0317 B	3372 D	277 C	2687	14653	0418	00424	1200
0250	0330	33754	251 B	2689	14663	0448	00498	1191
0300	0352	33865	171 B	2695	14682	0507	00663	1132
0400	0353	34015	096 B	2707	14701	0616	01052	1028

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0500	0350	34121	061	2716	14718	0716	01513	0953
0600	0344	34198	064 B	2723	14733	0809	02040	0897
0700	0331	34264	063 B	2729	14745	0897	02626	0842
0800	0315	34319	060 B	2735	14755	0980	03261	0790
1000	0284	34402	058 B	2744	14777	1131	04657	0708
1200	0258	34458	058 B	2751	14800	1269	06209	0650
1500	0227	34522	073 B	2759	14838	1457	08803	0583
2000	0195	34588	133 B	2767	14909	1737	13817	0519

C-REF-NO 003	YR 1965	DEPTH C 4206	WAVES 1 00X0	AIR T 07.4	VIS 7
CONS. NO 019	MONTH 5	MXSAMPD 04	WAVES 2 2041	WET B 06.3	STN 209
AT 50-000N	DAY 17	NO.DPTH 15	WND-DIR CALM	WW-CODE 60	
ON 144-580W	HR 19.0	W-COLOR 10	WND-SPD 00	CLD-TPE 6	
MARSD SQ 195	C/I 1802	W-TRNSP 14	BARO 1027.0	CLD-AMT 6	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
190	0000	063 B	32655	719 B	2569	14732
190	0003	0630	32678	729 B	2571	14733
190	0010	0632	32684	723 B	2571	14735
190	0020	0630 B	32686	721 B	2571	14736
190	0030	0620	32682	728 B	2572	14733
190	0050	0618	32683	727 B	2572	14736
190	0075	0574 B	32696	722 B	2579	14722
190	0100	0525	32722	724 B	2587	14706
190	0125	0476	32887	675 B	2605	14693
190	0150	0393	33228	551 B	2641	14666
190	0175	0356	33536	429 B	2669	14659
190	0200	0320	33632	346 B	2680	14649
190	0250	0324	33763	222 B	2690	14661
190	0300	0343	33876	132 B	2697	14679
190	0400	0354	34025	093 B	2708	14702

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0630 B	32655	719 B	2569	14732	0000	00000	2313
0010	0632	32684	723 B	2571	14735	0023	00001	2295
0020	0630 B	32686	721 B	2571	14736	0046	00005	2292
0030	0620	32682	728 B	2572	14733	0069	00011	2285
0050	0618	32683	727 B	2572	14736	0115	00030	2284
0075	0574 B	32696	722 B	2579	14722	0172	00066	2225
0100	0525	32722	724 B	2587	14706	0227	00115	2153
0125	0476	32887	675 B	2605	14692	0279	00175	1978
0150	0393	33228	551 B	2641	14666	0325	00239	1640
0175	0356	33536	429 B	2669	14659	0363	00302	1374
0200	0320	33632	346 B	2680	14649	0396	00365	1270
0225	0315 B	33704	278 B	2686	14652	0427	00434	1213
0250	0324	33763	222 B	2690	14661	0457	00507	1179
0300	0343	33876	132 B	2697	14679	0515	00670	1115
0400	0354	34025	093 B	2708	14702	0623	01055	1022

C-REF-NO 003	YR 1965	DEPTH C 4206	WAVES 1 3422	AIR T 06.1	VIS 7
CONS. NO 020	MONTH 5	MXSAMPD 20	WAVES 2 0944	WET B 04.1	STN 210
LAT 50-000N	DAY 19	NO.DPTH 21	WND-DIR 340	WW-CODE 15	
LON 145-000W	HR 19.0	W-COLOR 10	WND-SPD 02	CLD-TPE 6	
MARSD SQ 195	C/I 1802	W-TRNSP 14	BARO 1028.0	CLD-AMT 6	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
190	0000	067 B	32690	721 B	2566	14748
190	0010	0656	32689	728 B	2568	14744
190	0020	0625	32690	732 B	2572	14734
190	0030	0614 B	32688	728 B	2573	14731
190	0050	0607	32686	726 B	2574	14731
190	0075	0545	32711	716 B	2583	14710
190	0100	0492 B	32749	714 B	2592	14693
190	0125	0406	32876	715 B	2612	14663
190	0150	0372	33465	476 B	2662	14661
190	0175	0352	33600	408 B	2674	14658
190	0200	0361	33682	360 B	2680	14667
190	0250	0326	33773	280 B	2691	14662
190	0300	0344	33885	129 B	2698	14679
190	0400	0351	34030	085 B	2709	14701
196	0498	0350	34127	063	2716	14718
196	0598	0340	34197		2723	14731
196	0799	0315	34315	062 B	2735	14755
196	0998	0282	34401	058 B	2745	14775
196	1195	0259	34451	061 B	2751	14799
196	1494	0227	34517	077 B	2758	14837
196	1992	0194	34589	137 B	2767	14908

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0670 B	32690	721 B	2566	14748	0000	00000	2336
0010	0656	32689	728 B	2568	14744	0023	00001	2321
0020	0625	32690	732 B	2572	14734	0047	00005	2283
0030	0614 B	32688	728 B	2573	14731	0070	00011	2273
0050	0607	32686	726 B	2574	14731	0115	00029	2268
0075	0545	32711	716 B	2583	14710	0171	00065	2181
0100	0492 B	32749	714 B	2592	14693	0225	00113	2097
0125	0406	32876	715 B	2612	14663	0276	00171	1915
0150	0372	33465	476 B	2662	14661	0318	00230	1441
0175	0352	33600	408 B	2674	14658	0353	00288	1323
0200	0361	33682	360 B	2680	14667	0385	00351	1271
0225	0345 C	3373 B	323 B	2686	14665	0417	00419	1220
0250	0326	33773	280 B	2691	14662	0447	00493	1173
0300	0344	33885	129 B	2698	14679	0504	00655	1110
0400	0351	34030	085 B	2709	14701	0612	01038	1015

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT. EN	SVA
0500	0350	34129	063	2717	14718	0711	01494	0948
0600	0340	34198	057 B	2723	14731	0804	02019	0892
0700	0328	34261	057 B	2729	14744	0891	02603	0841
0800	0315	34316	062 B	2735	14755	0974	03239	0793
1000	0282	34402	058 B	2745	14776	1126	04635	0706
1200	0258	34452	061 B	2751	14800	1263	06191	0655
1500	0228	34517	078 B	2758	14838	1453	08805	0588
2000	0194	34590	138 B	2767	14909	1733	13821	0516

C-REF-NO 003	YR 1965	DEPTH C 4206	WAVES 1 1625	AIR T 07.7	VIS 4
CONS. NO 021	MONTH 5	MXSAMPD 04	WAVES 2 1844	WET B 07.7	STN 211
LAT 50-030N	DAY 26	NO.DPTH 15	WND-DIR 160	WW-CODE 44	
LON 145-020W	HR 18.8	W-COLOR	WND-SPD 13	CLD-TPE X	
MARSD SQ 195	C/I 1802	W-TRNSP	BARO 1011.5	CLD-AMT 9	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
188	0000	068 B	32652	719 B	2562	14752
188	0003	0662	32652	723 B	2564	14745
188	0010	0660	32653	730 B	2565	14745
188	0020	0656 B	32653	727 B	2565	14746
188	0030	0642	32659	732 B	2567	14742
188	0050	0582 B	32688	727 B	2577	14721
188	0074	0539 B	32714	722 B	2584	14708
188	0099	0483	32745	712 B	2593	14689
188	0124	0433	32925	663 B	2613	14675
188	0149	0394	33309	531 B	2647	14668
188	0174	0354	33597	407 B	2674	14659
188	0198	0326	33665	329 B	2682	14652
188	0248	0326	33784	204 B	2691	14662
188	0298	0338	33886	138 B	2698	14676
188	0397	0353	34039	093 B	2709	14701

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0680 B	32652	719 B	2562	14752	0000	00000	2377
0010	0660	32653	730 B	2565	14745	0024	00001	2352
0020	0656 B	32653	727 B	2565	14746	0047	00005	2349
0030	0642	32659	732 B	2567	14742	0071	00011	2328
0050	0582 B	32688	727 B	2577	14721	0117	00030	2238
0075	0537 B	32714	722 B	2585	14707	0172	00065	2170
0100	0481	32749	711 B	2594	14689	0226	00113	2085
0125	0431	32939	658 B	2614	14675	0276	00171	1893
0150	0392	33324	526 B	2648	14667	0320	00231	1567
0175	0353	33602	403 B	2674	14658	0356	00292	1322
0200	0325	33670	323 B	2682	14652	0388	00354	1246
0225	0320 B	33732	255 B	2688	14655	0419	00421	1197
0250	0326	33788	201 B	2692	14662	0449	00493	1162
0300	0335 B	33890	128 B	2699	14675	0506	00654	1097
0400	0354	34043	094 B	2709	14702	0612	01034	1008

C-REF-NO 003	YR 1965	DEPTH C 4206	WAVES 1 2622	AIR T 07.7	VIS 7
CONS. NO 022	MONTH 5	MXSAMPD 41	WAVES 2 2752	WET B 07.2	STN 212
LAT 50-000N	DAY 28	NO.DPTH 26	WND-DIR 260	WW-CODE 02	
LON 144-520W	HR 19.1	W-COLOR 10	WND-SPD	CLD-TPE 3	
MARSD SQ 195	C/I 1802	W-TRNSP 12	BARO 1024.0	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
191	0000	072 B	32654	726 B	2557	14768
191	0010	0684	32576	731 B	2556	14754
191	0019	0684	32643	740 B	2561	14756
191	0029	0680 B	32636	733 B	2561	14756
191	0049	0626	32654	742 B	2569	14738
191	0073	0562	32706	739 B	2581	14717
191	0098	0529 B	32725	733 B	2586	14708
191	0122	0451	32785	718 B	2600	14680
191	0146	0419	33001	628 B	2620	14674
191	0169	0404	33472	500 B	2659	14677
191	0193	0362	33565	418 B	2671	14665
191	0240	0324	33671	298 B	2683	14658
191	0288	0330	33797	187 B	2692	14670
191	0382	0350	34005	105 B	2707	14697
191	0479	0350	34122	068 B	2716	14714
191	0577	0341	34198	062 B	2723	14728
201	0779	0313	34323	059 B	2736	14751
201	0974	0290		061 B		
201	1170	0264	34442	062 B	2749	14797
201	1465	0234 B	34511	073 B	2757	14835
201	1956	0197	34587	122	2767	14903
201	2448	0176		190		
201	2940	0160 B		247		
201	3432	0152 B		288		
201	3926	0150 B		326		
201	4124	0152		338		

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0720 B	32654	726 B	2557	14768	0000	00000	2426
0010	0684	32576	731 B	2556	14754	0024	00001	2440
0020	0684	32644	740 B	2561	14757	0049	00005	2390
0030	0678 B	32636	733 B	2561	14756	0073	00011	2390
0050	0623	32656	742 B	2570	14737	0120	00030	2310
0075	0560	32707	739 B	2581	14716	0177	00067	2200
0100	0522 B	32726	733 B	2587	14705	0232	00116	2147
0125	0445	32800	710 B	2601	14679	0284	00176	2012
0150	0417	3309 E	605 B	2627	14674	0332	00243	1769
0175	0394	3352 D	476 B	2663	14675	0372	00309	1427

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0200	0353	33583	398 B	2673	14662	0407	00376	1338
0225	0331	3364 B	333 B	2680	14658	0440	00448	1274
0250	0323	33697	272 B	2685	14659	0471	00525	1228
0300	0333	33828	170 B	2694	14674	0531	00693	1142
0400	0351	34032	095 B	2709	14701	0640	01081	1014
0500	0349	34140	065 B	2718	14718	0738	01534	0937
0600	0338	34214	061 B	2725	14731	0830	02051	0879
0700	0324	34279	059 B	2731	14742	0916	02625	0823
0800	0310	34332	059 B	2736	14754	0997	03247	0776
1000	0286	3440 B	061 B	2744	14778	1147	04634	0711
1200	0261	34450	063 B	2750	14801	1286	06201	0659
1500	0231 B	34518	076 B	2758	14839	1476	08829	0591
2000	0195		128					
2500	0174		197					
3000	0159 B		253					
3500	0151 B		294					
4000	0151		330					

-REF-NO 003 YR 1965 DEPTH C 3913 WAVES 1 2322 AIR T 10.5 VIS 3
 ONS. NO 023 MONTH 5 MXSAMPD 04 WAVES 2 2532 WET B 09.9 STN 012
 AT 49-490N DAY 31 NO.DPTH 14 WND-DIR 230 kW-CODE 45
 ON 142-400W HR 11.6 W-COLOR WND-SPD 09 CLD-TPE X
 ARSD SQ 159 C/I 1802 W-TRNSP BARO 1014.0 CLD-AMT 9 HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
116	0000	075 B	32659		2553	14779
116	0010	0738	32661		2555	14776
116	0019	0740	32665		2555	14779
116	0029	0725 B	32663		2557	14774
116	0048	0645 B	32687		2569	14746
116	0073	0592 B	32700		2577	14729
116	0097	0554 B	32708		2582	14718
116	0122	0488	32766		2594	14695
116	0146	0474 B	32997		2614	14697
116	0171	0490	33389		2643	14713
116	0196	0462	33620		2665	14708
116	0246	0387	33708		2679	14686
116	0296	0372	33773		2686	14689
116	0396	0370	33933		2699	14707

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0750 B	32659		2553	14779	0000	00000	2462
0010	0738	32661		2555	14776	0025	00001	2446
0020	0739	32665		2555	14779	0049	00005	2446
0030	0721 B	32664		2557	14773	0074	00011	2425
0050	0639 B	32689		2570	14744	0121	00031	2306
0075	0589 B	32700		2577	14728	0179	00067	2240
0100	0545 B	32709		2583	14715	0234	00117	2186
0125	0484	32786		2596	14695	0288	00179	2063
0150	0477 B	3306 C		2619	14699	0337	00248	1852
0175	0487	33436		2647	14713	0380	00320	1584
0200	0455	3364 B		2667	14706	0418	00392	1401
0225	0416 B	3370 F		2676	14695	0452	00466	1313
0250	0385	33713		2680	14686	0485	00546	1275
0300	0358 D	3379 B		2689	14684	0547	00721	1196
0400	0373	33939		2699	14709	0663	01136	1105

C-REF-NO 003	YR 1965	DEPTH C 3877	WAVES 1 2221	AIR T 09.9	VIS 2
CONS. NO 024	MONTH 5	MXSAMPD 15	WAVES 2 2621	WET B 09.4	STN 011
LAT 49-480N	DAY 31	NO.DPTH 20	WND-DIR 220	WW-CODE 47	
LON 140-400W	HR 22.0	W-COLOR	WND-SPD 02	CLD-TPE X	
MARSD SQ 159	C/I 1802	W-TRNSP	BARO 1016.0	CLD-AMT 9	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
220	0000	082 B	32634		2541	14806
220	0010	0796	32637		2545	14799
220	0020	0790	32653		2547	14798
220	0030	0768 B	32657		2550	14791
220	0050	0670	32689		2566	14756
220	0075	0611 B	32705		2575	14737
220	0100	0525 B	32806		2593	14708
220	0125	0494	32956		2609	14701
220	0150	0537	33421		2640	14729
220	0175	0463	33557		2660	14704
220	0200	0431	33648		2670	14696
220	0250	0396	33722		2680	14691
220	0300	0394	33844		2690	14700
220	0400	0386	33964		2700	14715
223	0499	0382	34087		2710	14731
223	0598	0362	34160		2718	14740
223	0798	0333	34282		2730	14762
223	0997	0301	34358		2739	14783
223	1197	0270	34428		2748	14804
223	1496	0236	34497		2756	14840

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0820 B	32634		2541	14806	0000	00000	2576
0010	0796	32637		2545	14799	0026	00001	2542
0020	0790	32653		2547	14798	0051	00005	2523
0030	0768 B	32657		2550	14791	0076	00012	2492
0050	0670	32689		2566	14756	0125	00031	2343
0075	0611 B	32705		2575	14737	0183	00069	2262
0100	0525 B	32806		2593	14708	0238	00117	2090
0125	0494	32956		2609	14701	0289	00176	1946
0150	0537	33421		2640	14729	0334	00239	1648
0175	0463	33557		2660	14704	0373	00304	1467
0200	0431	33648		2670	14696	0409	00373	1367
0225	0409	3369 C		2676	14692	0443	00447	1314
0250	0396	33722		2680	14691	0475	00526	1280
0300	0394	33844		2690	14700	0538	00701	1190
0400	0386	33964		2700	14715	0653	01115	1100
0500	0382	34088		2710	14731	0760	01605	1012

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0600	0362	34161		2718	14740	0859	02162	0943
0700	0346	34227		2725	14751	0951	02778	0885
0800	0333	34283		2730	14763	1038	03448	0836
1000	0301	34359		2740	14783	1199	04934	0758
1200	0271	34426		2748	14805	1346	06586	0688
1500	0236	34498		2756	14841	1543	09316	0611

C-REF-NO 003	YR 1965	DEPTH C 3886	WAVES 1 1800	AIR T 08.8	VIS 0
CONS. NO 025	MONTH 6	MXSAMPD 04	WAVES 2 2342	WET B 08.8	STN 010
LAT 49-340N	DAY 01	NO.DPTH 14	WND-DIR 230	WW-CODE 45	
LON 138-400W	HR 04.7	W-COLOR 10	WND-SPD 02	CLD-TPE X	
MARSD SQ 158	C/I 1802	W-TRNSP 11	BARO 1017.0	CLD-AMT 9	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
047	0000	082 B	32623		2540	14806
047	0010	0812	32619		2541	14805
047	0020	0787	32632		2546	14797
047	0030	0646 B	32666		2568	14743
047	0050	0627	32670		2570	14739
047	0075	0596	32698		2576	14731
047	0099	0517 B	32751		2590	14703
047	0124	0509	33025		2612	14708
047	0149	0536	33461		2644	14729
047	0174	0536	33685		2661	14736
047	0199	0546	33811		2670	14746
047	0249	0510	33877		2680	14740
047	0298	0441	33882		2688	14720
047	0398	0417	33991		2699	14728

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0820 B	32623		2540	14806	0000	00000	2584
0010	0812	32619		2541	14805	0026	00001	2578
0020	0787	32632		2546	14797	0052	00005	2535
0030	0646 B	32666		2568	14743	0076	00011	2328
0050	0627	32670		2570	14739	0123	00031	2304
0075	0596	32698		2576	14731	0180	00067	2249
0100	0516 B	32758		2591	14703	0235	00116	2115
0125	0510	33043		2614	14709	0286	00174	1898
0150	0536	33473		2645	14729	0330	00236	1608
0175	0536	33692		2662	14736	0368	00300	1448
0200	0546	33814		2670	14746	0404	00368	1371
0225	0534	3387 C		2676	14746	0438	00442	1322
0250	0509	33877		2680	14740	0470	00522	1286
0300	0458 F	3391 E		2688	14727	0533	00700	1211
0400	0417	33993		2699	14728	0651	01118	1112

C-REF-NO 003	YR 1965	DEPTH C 3767	WAVES 1 2110	AIR T 09.9	VIS 0
CONS. NO 026	MONTH 6	MXSAMPD 35	WAVES 2 2311	WET B 09.4	STN 009
LAT 49-280N	DAY 01	NO.DPTH 24	WND-DIR 230	WW-CODE 45	
LON 136-400W	HR 11.6	W-COLOR	WND-SPD 01	CLD-TPE X	
MARSD SQ 158	C/I 1802	W-TRNSP	BARO 1017.0	CLD-AMT 9	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
116	0000	088 B	32564		2527	14828
116	0010	0858	32566		2530	14821
116	0019	0833	32573		2534	14813
116	0029	0727 B	32594		2551	14774
116	0049	0708 B	32609		2555	14770
116	0073	0680 B	32613		2559	14763
116	0097	0544 B	32755		2587	14714
116	0120	0546	33078		2612	14723
116	0144	0556 B	33600		2652	14738
116	0168	0544	33701		2662	14738
116	0192	0525 B	33791		2671	14736
116	0239	0496	33866		2680	14733
116	0286	0453	33893		2687	14723
116	0380	0411	33961		2697	14722
116	0475	0396	34060		2707	14732
116	0565	0389	34158		2715	14746
123	0787	0342	34286		2730	14764
123	0990	0303	34373		2740	14783
123	1190	0270	34411		2746	14803
123	1487	0232	34513		2758	14837
123	1984	0192	34594		2767	14905
123	2490	0168	34637		2773	14982
123	2987	0158 B	34664		2776	15064
123	3490	0156 B	34675		2777	15151

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0880 B	32564		2527	14828	0000	00000	2714
0010	0858	32566		2530	14821	0027	00001	2682
0020	0823	32575		2536	14810	0054	00005	2627
0030	0723 B	32595		2552	14773	0080	00012	2478
0050	0708 B	32608		2555	14770	0129	00032	2452
0075	0668 B	32618		2561	14759	0190	00071	2396
0100	0540 B	32787		2590	14714	0247	00122	2121
0125	0549	3320 F		2621	14727	0297	00179	1827
0150	0554 B	3365 D		2656	14739	0339	00237	1501
0175	0539	33730		2665	14738	0375	00299	1422
0200	0520 B	33810		2673	14735	0410	00366	1343
0225	0505	33853		2678	14734	0444	00438	1296

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0250	0486	33874		2682	14730	0476	00517	1262
0300	0444	33902		2689	14722	0538	00692	1200
0400	0406	33980		2699	14723	0654	01108	1110
0500	0394	34088		2709	14736	0762	01604	1024
0600	0383	34185		2718	14749	0862	02166	0949
0700	0363	3425 B		2725	14758	0955	02784	0888
0800	0339	34293		2731	14766	1042	03456	0836
1000	0301	34375		2741	14784	1202	04930	0747
1200	0269	34414		2747	14804	1348	06578	0694
1500	0231	34516		2758	14839	1544	09275	0592
2000	0191	34596		2768	14908	1823	14268	0509
2500	0168	34638		2773	14984	2072	20012	0467
3000	0157	34664		2776	15066	2305	26646	0449
3500	0156 B	34675		2777	15153	2537	34424	0455

C-REF-NO 003	YR 1965	DEPTH C 3557	WAVES 1 2322	AIR T 09.9	VIS 0
CONS. NO 027	MONTH 6	MXSAMPD 04	WAVES 2 2332	WET B 09.9	STN 008
LAT 49-190N	DAY 01	NO.DPTH 14	WND-DIR 230	WW-CODE 45	
LON 134-400W	HR 18.7	W-COLOR	WND-SPD 05	CLD-TPE X	
MARSD SQ 158	C/I 1802	W-TRNSP	BARO 1018.0	CLD-AMT 9	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
187	0000	090 B	32500		2518	14835
187	0010	0893	32399		2512	14832
187	0020	0868	32466		2521	14826
187	0030	0784 B	32602		2544	14797
187	0050	0766 B	32582		2545	14793
187	0075	0646 C	32632		2565	14750
187	0100	0590 B	32669		2575	14732
187	0125	0587	32901		2593	14738
187	0150	0606	33469		2636	14758
187	0175	0549	33689		2660	14741
187	0200	0532	33783		2670	14740
187	0250	0498	33846		2679	14735
187	0300	0455	33854		2684	14726
187	0400	0418	33883		2690	14727

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0900 B	32500		2518	14835	0000	00000	2791
0010	0893	32399		2512	14832	0028	00001	2857
0020	0868	32466		2521	14826	0057	00006	2773
0030	0784 B	32602		2544	14797	0084	00013	2555
0050	0766 B	32582		2545	14793	0135	00034	2548
0075	0646 C	32632		2565	14750	0197	00073	2359
0100	0590 B	32669		2575	14732	0255	00125	2267
0125	0587	32901		2593	14738	0310	00188	2092
0150	0606	33469		2636	14758	0357	00255	1694
0175	0549	33689		2660	14741	0397	00321	1465
0200	0532	33783		2670	14740	0433	00389	1377
0225	0516	3383 B		2675	14738	0467	00464	1327
0250	0498	33846		2679	14735	0500	00544	1297
0300	0455	33854		2684	14725	0564	00725	1248
0400	0418	33883		2690	14727	0687	01167	1195

C-REF-NO 003	YR 1965	DEPTH C 3273	WAVES 1 2422	AIR T 12.2	VIS 7
CONS. NO 028	MONTH 6	MXSAMPD 04	WAVES 2 2433	WET B 10.5	STN 007
LAT 49-100N	DAY 02	NO.DPTH 14	WND-DIR 240	WW-CODE 02	
LON 132-400W	HR 01.1	W-COLOR	WND-SPD 05	CLD-TPE 9	
MARSD SQ 158	C/I 1802	W-TRNSP	BARO 1019.0	CLD-AMT 6	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
011	0000	098 B	32547		2509	14865
011	0010	0948	32542		2514	14855
011	0020	0894	32563		2524	14837
011	0030	0846 B	32546		2530	14820
011	0050	0786	32525		2537	14800
011	0075	0656 B	32582		2560	14754
011	0099	0604 B	32732		2578	14739
011	0124	0607	33139		2610	14749
011	0149	0600	33457		2636	14755
011	0174	0582	33670		2655	14754
011	0199	0550	33773		2667	14747
011	0249	0493	33840		2679	14733
011	0298	0460	33855		2683	14727
011	0398	0418	33986		2698	14728

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0980 B	32547		2509	14865	0000	00000	2878
0010	0948	32542		2514	14855	0029	00001	2834
0020	0894	32563		2524	14837	0057	00006	2739
0030	0846 B	32546		2530	14820	0084	00013	2683
0050	0786	32525		2537	14800	0137	00035	2618
0075	0656 B	32582		2560	14754	0201	00075	2409
0100	0604 B	32747		2579	14739	0259	00127	2225
0125	0607	33154		2611	14750	0311	00187	1928
0150	0600	33468		2637	14755	0357	00250	1687
0175	0581	33676		2655	14754	0397	00317	1512
0200	0549	33776		2667	14747	0434	00388	1403
0225	0518	3382 B		2674	14739	0468	00463	1335
0250	0492	33840		2679	14732	0501	00544	1294
0300	0455 B	3388 E		2686	14726	0565	00723	1230
0400	0418	33988		2699	14728	0683	01146	1116

C-REF-NO 003	YR 1965	DEPTH C 2935	WAVES 1 2521	AIR T 10.5	VIS 7
CONS. NO 029	MONTH 6	MXSAMPD 15	WAVES 2 2522	WET B 10.5	STN 006
LAT 49-020N	DAY 02	NO.DPTH 20	WND-DIR 250	WW-CODE 60	
LON 130-400W	HR 07.5	W-COLOR	WND-SPD 05	CLD-TPE	
MARSD SQ 158	C/I 1802	W-TRNSP	BARO 1019.0	CLD-AMT 7	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
075	0000	102 B	32346		2487	14877
075	0010	0999	32346		2491	14871
075	0020	0971	32340		2495	14862
075	0030	0895 B	32340		2507	14836
075	0050	0738 B	32483		2541	14781
075	0074	0671 B	32588		2558	14759
075	0099	0654 B	32818		2578	14760
075	0124	0649	33297		2617	14768
075	0149	0640	33593		2641	14773
075	0174	0626	33760		2656	14773
075	0199	0614	33858		2665	14774
075	0249	0564	33897		2675	14763
075	0298	0505	33881		2681	14746
075	0396	0457	33966		2693	14744
078	0488	0414	34040		2703	14742
078	0586	0392	34135		2713	14750
078	0783	0358	34270		2727	14770
078	0980	0318	34377		2739	14788
078	1177	0282	34452		2749	14806
078	1472	0238	34514		2757	14838

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1020 B	32346		2487	14877	0000	00000	3090
0010	0999	32346		2491	14871	0031	00002	3058
0020	0971	32340		2495	14862	0061	00006	3021
0030	0895 B	32340		2507	14836	0091	00014	2907
0050	0738 B	32483		2541	14781	0147	00036	2584
0075	0670 B	32594		2559	14759	0209	00076	2417
0100	0654 B	32837		2580	14760	0268	00128	2219
0125	0649	33312		2618	14768	0319	00187	1861
0150	0639	33602		2642	14773	0363	00249	1637
0175	0626	33765		2657	14773	0403	00314	1501
0200	0613	33860		2666	14774	0439	00385	1418
0225	0591	3390 B		2671	14769	0475	00461	1367
0250	0563	33897		2675	14762	0509	00544	1335
0300	0504	33882		2681	14746	0575	00730	1282
0400	0455	33969		2693	14743	0698	01172	1171
0500	0411	34052		2704	14743	0811	01693	1070

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0600	0389	34146		2714	14752	0915	02277	0985
0700	0372	34219		2722	14762	1011	02918	0919
0800	0355	34280		2728	14772	1101	03611	0862
1000	0314	34386		2740	14789	1265	05114	0753
1200	0278	34460		2750	14809	1409	06739	0671
1500	0234	34516		2758	14841	1602	09403	0596

C-REF-NO 003 YR 1965 DEPTH C 2532 WAVES 1 2511 AIR T 12.2 VIS 7
 CONS. NO 030 MONTH 6 MXSAMPD 04 WAVES 2 2622 WET B 11.1 STN 005
 LAT 48-470N DAY 02 NO.DPTH 14 WND-DIR 260 WW-CODE 03
 LON 128-400W HR 14.3 W-COLOR 40 WND-SPD 05 CLD-TPE 6
 MARSD SQ 157 C/I 1802 W-TRNSP BARO 1018.0 CLD-AMT 8 HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
143	0000	102 B	32120		2469	14874
143	0010	1012	32091		2469	14873
143	0020	0991	32066		2470	14866
143	0030	0926 B	31986		2474	14843
143	0049	0814	32207		2509	14806
143	0074	0706	32640		2558	14774
143	0099	0736 B	33187		2596	14797
143	0124	0726	33512		2623	14801
143	0148	0691	33701		2643	14794
143	0173	0682	33802		2652	14796
143	0198	0669	33867		2659	14796
143	0247	0630	33930		2669	14789
143	0297	0582	33957		2677	14779
143	0396	0537	34051		2690	14778

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1020 B	32120		2469	14874	0000	00000	3257
0010	1012	32091		2469	14873	0033	00002	3268
0020	0991	32066		2470	14866	0066	00007	3255
0030	0926 B	31986		2474	14843	0098	00015	3216
0050	0808	32222		2511	14804	0159	00040	2874
0075	0706	32663		2559	14775	0226	00082	2412
0100	0736 B	33203		2598	14797	0282	00131	2053
0125	0725	33522		2624	14801	0331	00187	1803
0150	0690	33712		2644	14794	0374	00248	1620
0175	0681	33808		2653	14796	0413	00314	1540
0200	0668	33871		2659	14796	0452	00387	1479
0225	0649	33909		2665	14793	0488	00467	1430
0250	0627	33932		2670	14788	0524	00553	1388
0300	0586 B	3397 C		2678	14781	0592	00745	1313
0400	0536	34054		2691	14778	0719	01198	1202

C-REF-NO 003	YR 1965	DEPTH C 2496	WAVES 1 3122	AIR T 11.6	VIS 7
CONS. NO 031	MONTH 6	MXSAMPD 24	WAVES 2 3133	WET B 11.1	STN 004
LAT 48-470N	DAY 02	NO.DPTH 22	WND-DIR 310	WW-CODE 02	
LCN 127-400W	HR 17.6	W-COLOR 40	WND-SPD 05	CLD-TPE 6	
MARSD SQ 157	C/I 1802	W-TRNSP 07	BARO 1018.0	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
176	0000	108 B	32079		2456	14896
176	0010	1040	32067		2462	14883
176	0020	1025	32071		2465	14879
176	0030	0992 B	32070		2470	14868
176	0049	0869	32145		2496	14826
176	0074	0704	32550		2551	14772
176	0099	0730 B	32994		2582	14792
176	0124	0780	33558		2619	14823
176	0148	0763	33761		2638	14823
176	0173	0732	33886		2652	14817
176	0198	0717	33955		2659	14816
176	0247	0648	33982		2671	14797
176	0297	0602	33993		2678	14787
176	0396	0532	34048		2691	14776
180	0492	0490	34125		2702	14775
180	0591	0452	34209		2712	14777
180	0791	0399	34308		2726	14789
180	0989	0344	34383		2737	14800
180	1186	0305	34443		2746	14817
180	1484	0248	34522		2757	14844
180	1978	0192	34594		2767	14904
180	2378	0176 B	34637		2772	14966

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1080 B	32079		2456	14896	0000	00000	3385
0010	1040	32067		2462	14883	0034	00002	3330
0020	1025	32071		2465	14879	0067	00007	3305
0030	0992 B	32070		2470	14868	0100	00015	3256
0050	0861	32157		2498	14824	0163	00041	2996
0075	0703	32566		2552	14772	0232	00084	2480
0100	0732 B	33019		2584	14794	0291	00136	2185
0125	0780	33571		2620	14823	0341	00194	1844
0150	0760	33774		2639	14823	0385	00256	1669
0175	0731	33893		2653	14817	0426	00324	1543
0200	0714	33958		2660	14815	0464	00397	1477
0225	0681 B	3398 B		2666	14806	0500	00476	1419
0250	0645	33983		2671	14796	0536	00562	1373
0300	0599	33994		2678	14786	0603	00753	1314

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0400	0530	34051		2691	14776	0730	01205	1198
0500	0487	34132		2702	14775	0846	01738	1097
0600	0449	34215		2713	14778	0952	02335	1001
0700	0421	34270		2721	14783	1050	02988	0937
0800	0396	34312		2726	14790	1142	03697	0886
1000	0342	34387		2738	14801	1311	05251	0784
1200	0302	34447		2746	14819	1462	06954	0708
1500	0245	34525		2758	14846	1661	09701	0602
2000	0189	3460 B		2768	14907	1942	14693	0501

C-REF-NO 003	YR 1965	DEPTH C 1298	WAVES 1 3222	AIR T 12.7	VIS 4
CONS. NO 032	MONTH 6	MXSAMPD 12	WAVES 2 3222	WET B 11.6	STN 003
LAT 48-420N	DAY 02	NO.DPTH 19	WND-DIR 320	WW-CODE 43	
LON 126-400W	HR 21.6	W-COLOR 70	WND-SPD 08	CLD-TPE X	
MARSD SQ 157	C/I 1802	W-TRNSP 04	BARO 1021.0	CLD-AMT 9	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
216	0000	107 B	32068		2457	14892
216	0010	1014	32064		2466	14873
216	0020	0952	32094		2479	14852
216	0030	0939 B	32108		2482	14849
216	0049	0805 B	32346		2521	14805
216	0074	0692 B	32545		2552	14767
216	0098	0707 B	33023		2588	14783
216	0123	0725	33508		2623	14801
216	0147	0712	33772		2646	14803
216	0171	0696	33867		2655	14802
216	0196	0686	33919		2661	14803
216	0245	0652	33950		2668	14798
216	0294	0614	34004		2677	14792
216	0393	0509	34060		2694	14766
220	0500	0474	34134		2704	14770
220	0600	0440	34206		2713	14774
220	0800	0396	34310		2726	14790
220	0996	0342	34396		2739	14801
220	1195	0290	34470		2749	14813

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1070 B	32068		2457	14892	0000	00000	3377
0010	1014	32064		2466	14873	0034	00002	3291
0020	0952	32094		2479	14852	0066	00007	3174
0030	0939 B	32108		2482	14849	0098	00015	3146
0050	0799 B	32352		2522	14802	0157	00039	2763
0075	0691 B	32562		2553	14767	0223	00080	2468
0100	0709 B	33066		2591	14785	0281	00132	2119
0125	0725	33537		2626	14801	0330	00188	1792
0150	0710	33790		2647	14803	0373	00248	1588
0175	0694	33878		2656	14802	0412	00313	1506
0200	0684	33923		2661	14803	0449	00384	1462
0225	0667	3394 B		2665	14801	0485	00464	1430
0250	0648	33955		2669	14797	0521	00551	1398
0300	0607	34008		2678	14790	0589	00743	1313
0400	0505	34065		2695	14766	0714	01187	1158
0500	0474	34134		2704	14770	0827	01708	1080
0600	0440	34206		2713	14774	0932	02299	0997

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0700	0417	34262		2720	14781	1030	02951	0938
0800	0396	34310		2726	14790	1122	03661	0887
1000	0343	34398		2739	14802	1290	05209	0777
1200	0289	34472		2750	14813	1437	06863	0674

C-REF-NO 003	YR 1965	DEPTH 109	WAVES 1 3323	AIR T 12.2	VIS 6
CONS. NO 033	MONTH 6	MXSAMPD 01	WAVES 2 3332	WET B 11.1	STN 002
LAT 48-380N	DAY 03	NO.DPTH 7	WND-DIR 310	WW-CODE 01	
LON 126-000W	HR 00.5	W-COLOR 40	WND-SPD 08	CLD-TPE 6	
MARSD SQ 157	C/I 1802	W-TRNSP	BARO 1020.0	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
005	0000	113 B	31626		2412	14908
005	0010	1094	31622		2418	14896
005	0020	0898 B	32005		2480	14831
005	0029	0802 B	32346		2521	14800
005	0049	0768	32718		2555	14795
005	0073	0746 B	33372		2610	14799
005	0098	0714 B	33835		2650	14797

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1130 B	31626		2412	14908	0000	00000	3803
0010	1094	31622		2418	14896	0038	00002	3748
0020	0898 B	32005		2480	14831	0073	00007	3159
0030	0797 B	3237 B		2524	14799	0102	00015	2746
0050	0767	32745		2557	14795	0154	00036	2428
0075	0739 B	3334 I		2608	14796	0209	00070	1948
0100	0712 B	3388 B		2654	14797	0253	00109	1518

C-REF-NO 003 YR 1965 DEPTH 128 WAVES 1 2323 AIR T 11.6 VIS 7
 CONS. NO 034 MONTH 6 MXSAMPD 01 WAVES 2 2333 WET B 10.5 STN 001
 LAT 48-330N DAY 03 NO.DPTH 7 WND-DIR 240 WW-CODE 02
 LON 125-330W HR 01.9 W-COLOR 40 WND-SPD 12 CLD-TPE 3
 MARSD SQ 157 C/I 1802 W-TRNSP BARO 1020.0 CLD-AMT 2 HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
019	0000	112 B	31731		2422	14905
019	0010	1074	31740		2431	14891
019	0020	1058	31754		2435	14887
019	0030	0882 B	31986		2481	14826
019	0050	0808 B	32576		2538	14809
019	0075	0721	33579		2629	14792
019	0090	0710 B	33665		2638	14792

TIME-DISTANCE CHECK FAILED

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1120 B	31731		2422	14905	0000	00000	3709
0010	1074	31740		2431	14891	0037	00002	3628
0020	1058	31754		2435	14887	0073	00007	3593
0030	0882 B	31986		2481	14826	0107	00016	3151
0050	0808 B	32576		2538	14809	0165	00039	2610
0075	0721	33579		2629	14792	0220	00073	1749

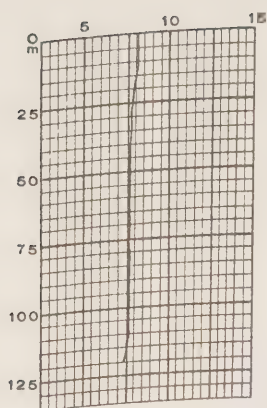
SECTION IV

Bathythermograms

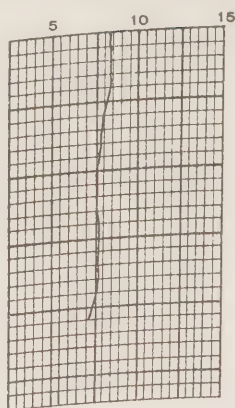
CCGS "ST. CATHARINES"

Daily bathythermograms
and
OCEAN series bathythermograms

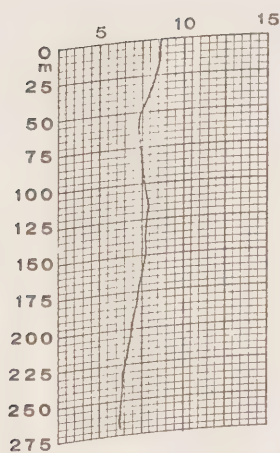
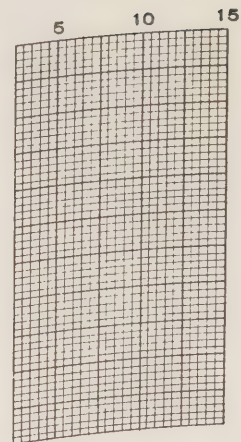
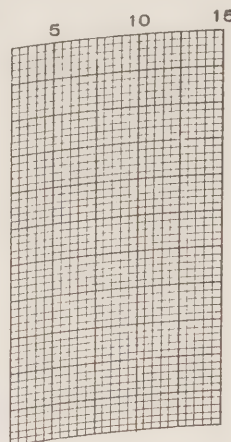
C.C.G.S. "St. Catharines", Survey P-65-2



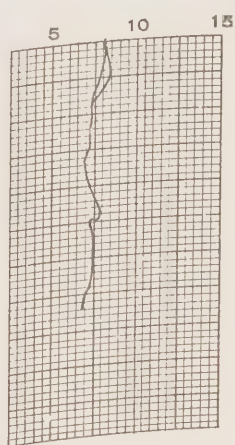
65-04-17-01.0
48°33'n
125°33'w



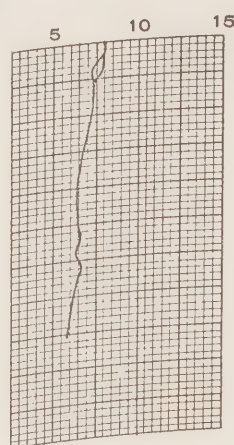
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48°38'n
126°00'w



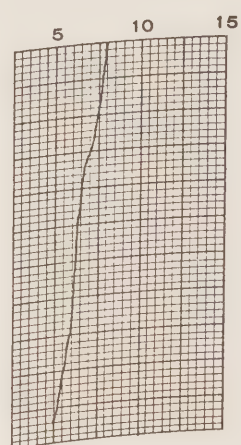
65-04-17-06.0
48°42'n
126°40'w



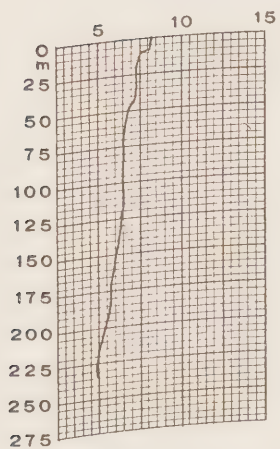
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48°46'n
127°40'w



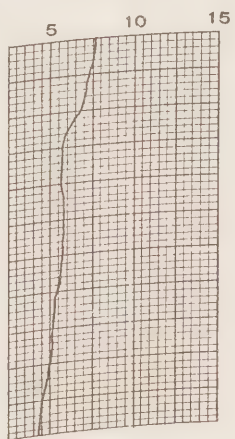
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128°40'w



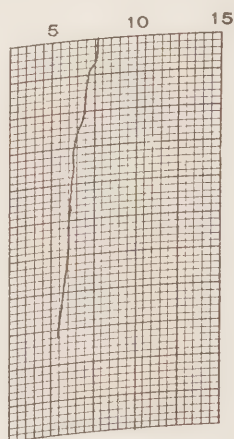
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49°02'n
130°40'w



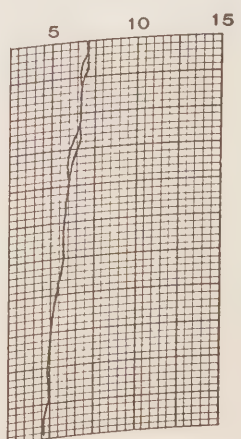
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49°04'n
131°40'w



65-04-18-02.6
49°10'n
132°40'w

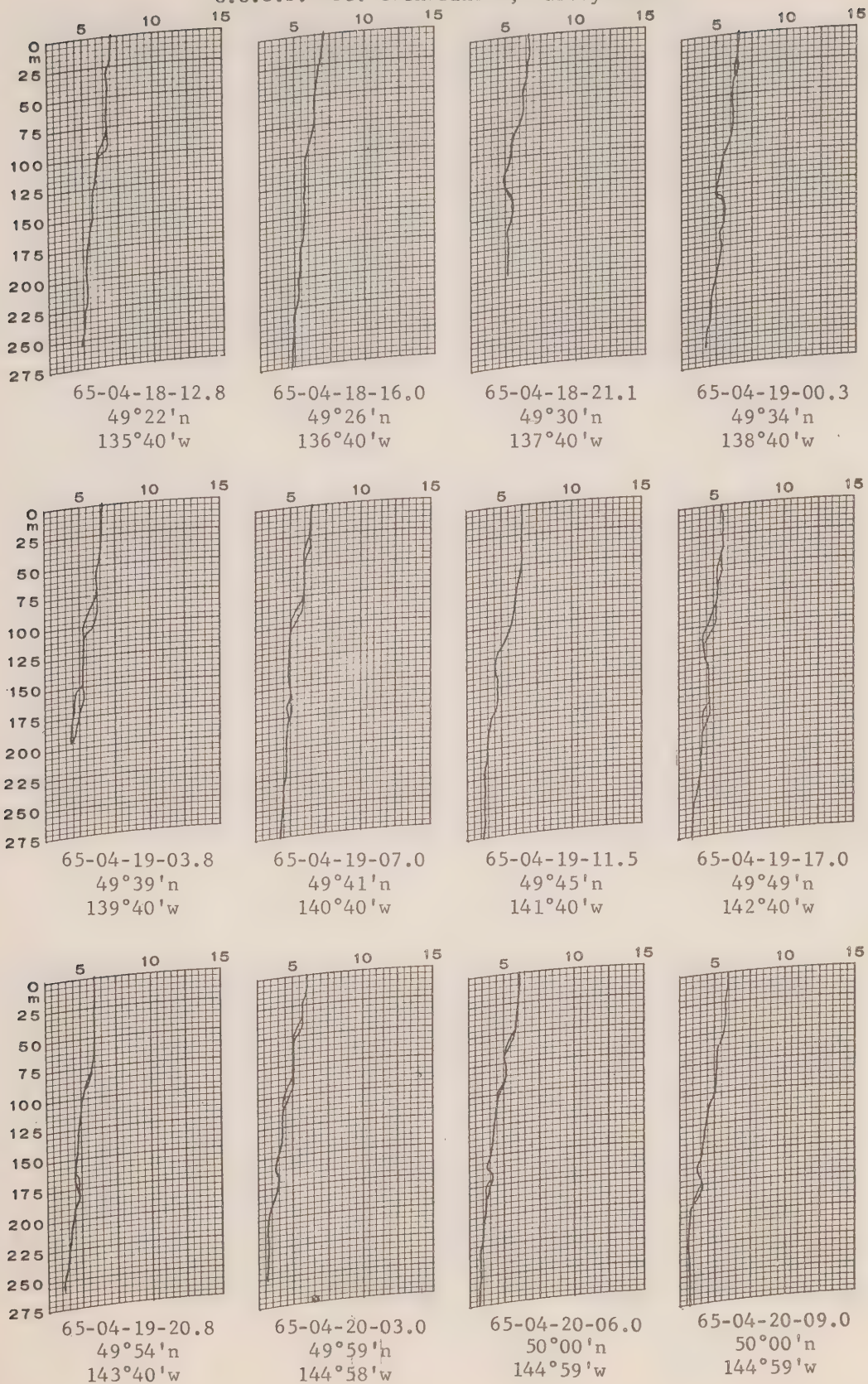


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49°15'n
133°40'w

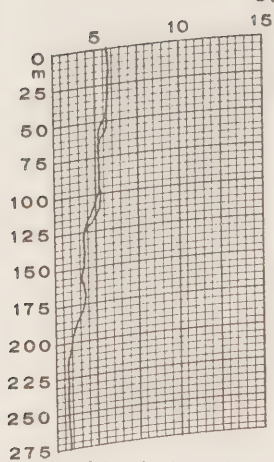


65-04-18-09.2
49°17'n
134°40'w

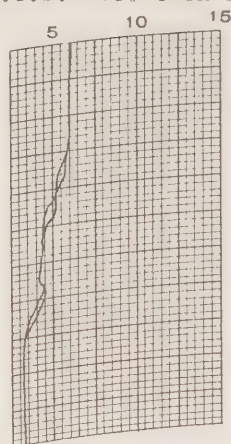
C.C.G.S. "St. Catharines", Survey P-65-2



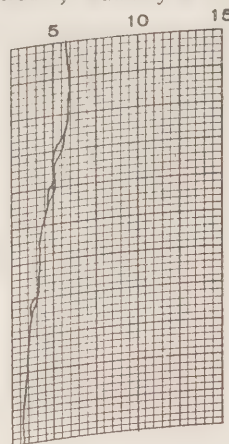
C.C.G.S. "St. Catharines", Survey P-65-2



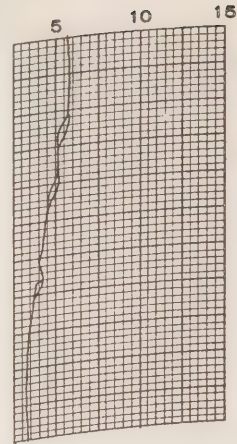
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50°02'N
145°03'W



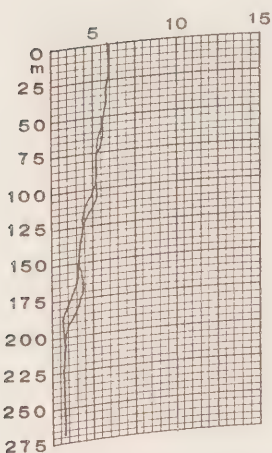
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50°04'N
144°57'W



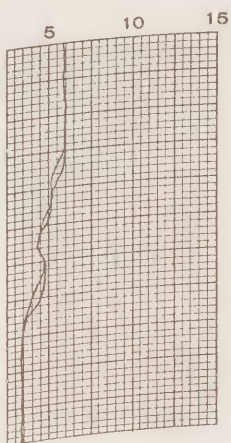
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50°00'N
144°59'W



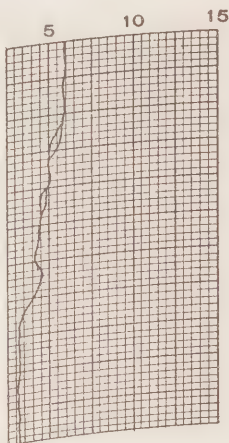
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144°59'W



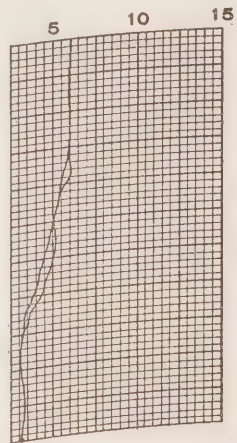
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49°55'N
144°57'W



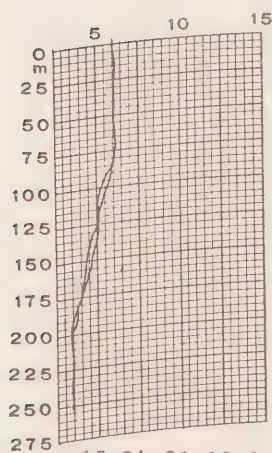
65-04-21-00.0
49°57'N
144°53'W



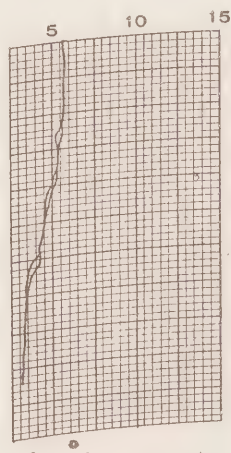
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50°00'N
144°58'W



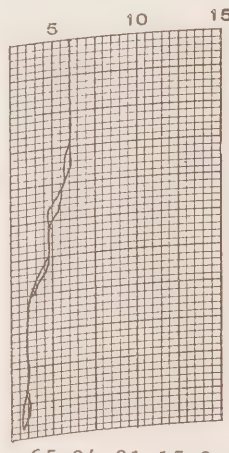
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50°01'N
145°03'W



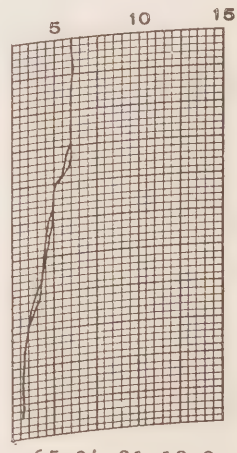
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145°12'W



65-04-21-12.0
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145°24'W

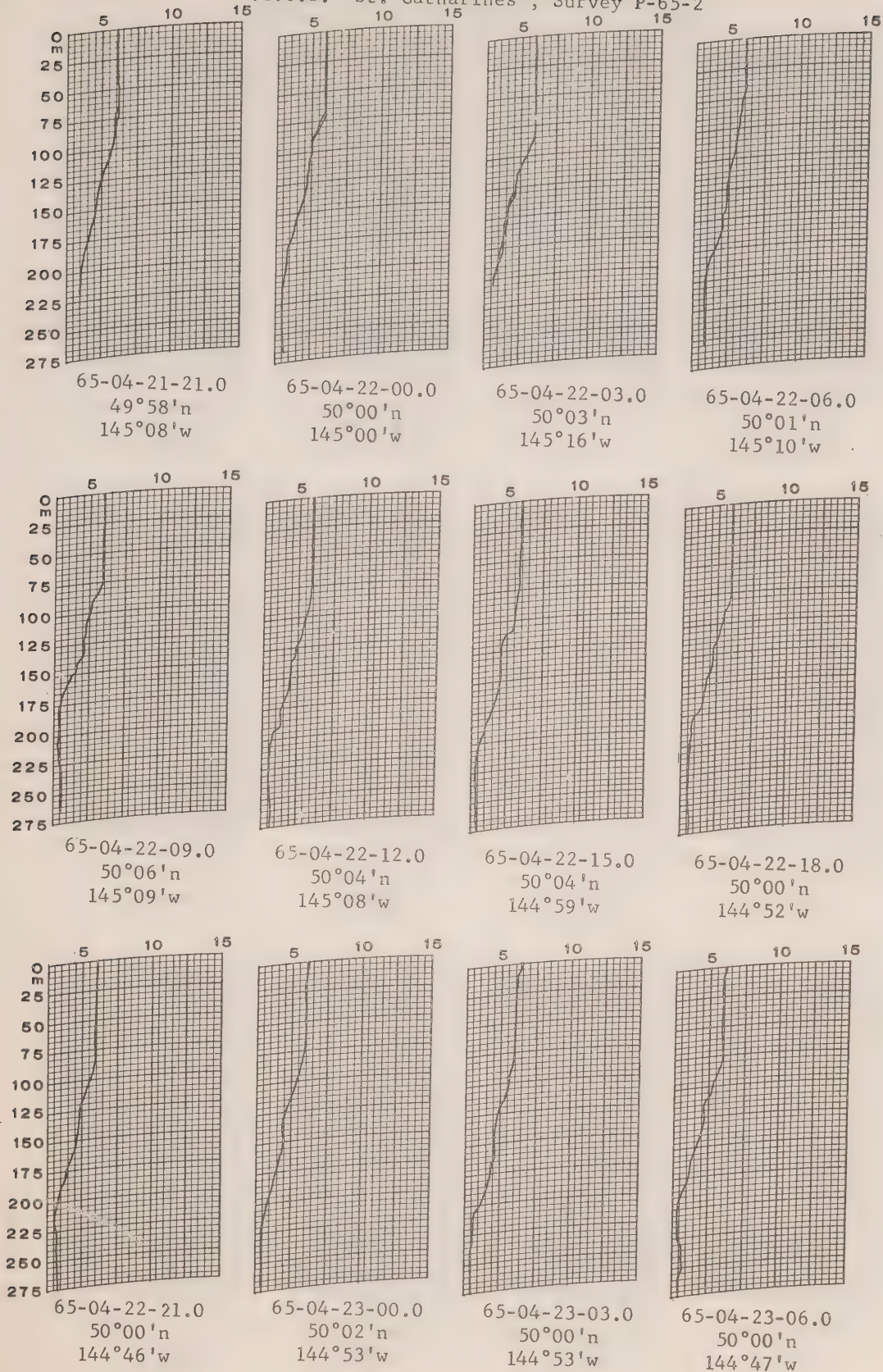


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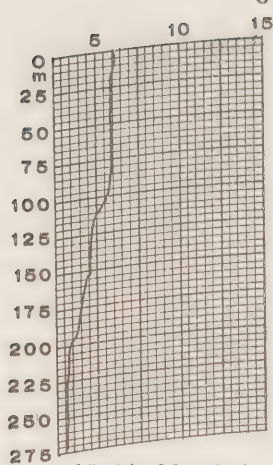


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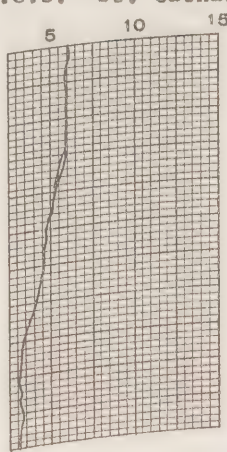
C.C.G.S. "St. Catharines", Survey P-65-2



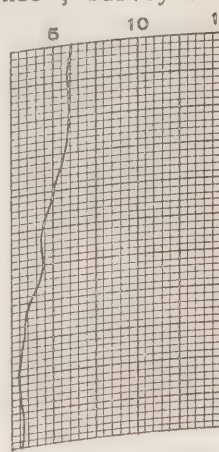
C.C.G.S. "St. Catharines", Survey P-65-2



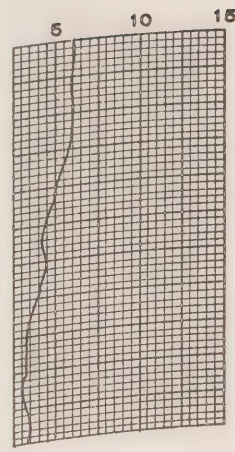
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50°08'N
144°45'W



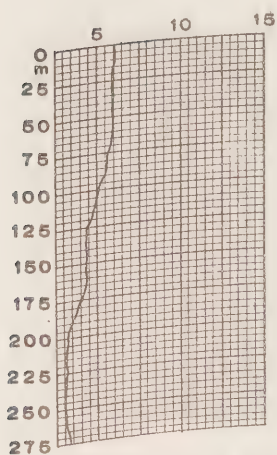
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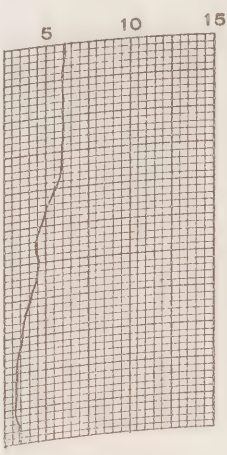
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49°54'N
144°56'W



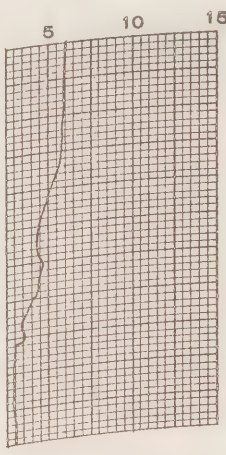
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144°53'W



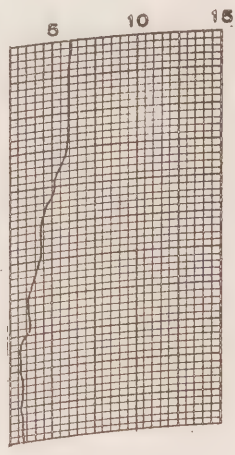
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49°54'N
144°53'W



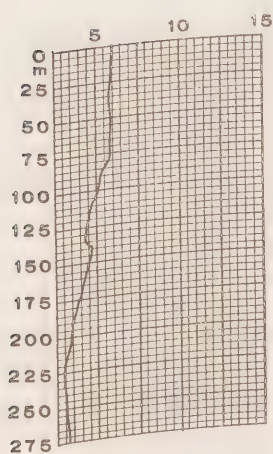
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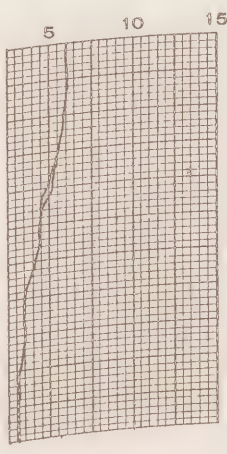
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50°00'N
144°58'W



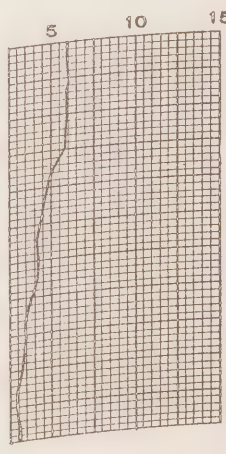
65-04-24-03.0
50°00'N
144°59'W



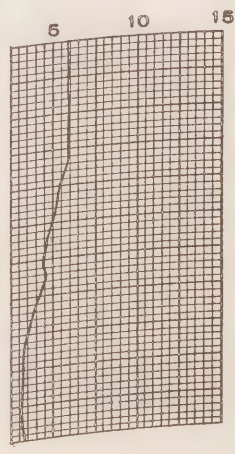
65-04-24-06.0
50°02'N
145°03'W



65-04-24-09.0
50°05'N
145°00'W

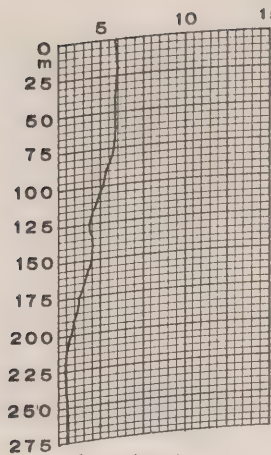


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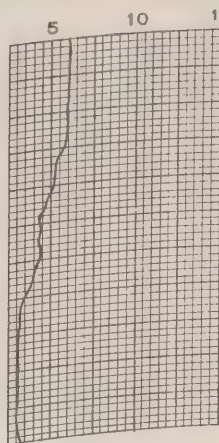


65-04-24-15.0
50°01'N
145°00'W

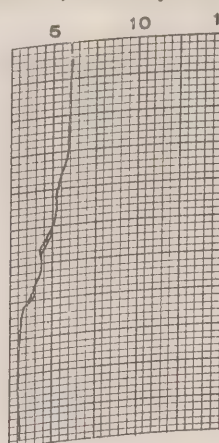
C.C.G.S. "St. Catharines", Survey P-65-2



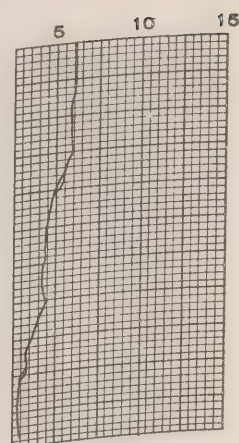
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145°02'W



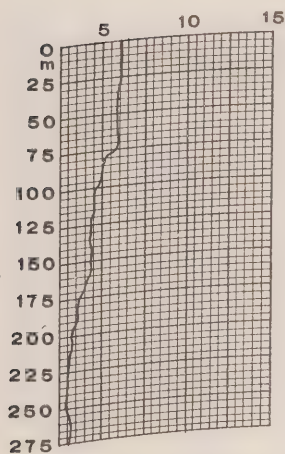
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50°07'N
145°05'W



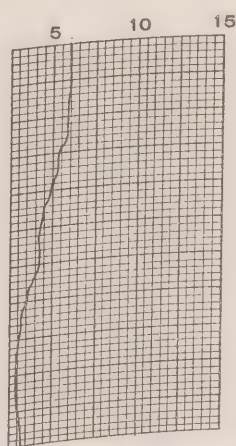
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50°07'N
145°04'W



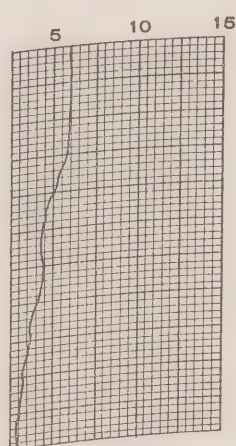
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50°01'N
144°55'W



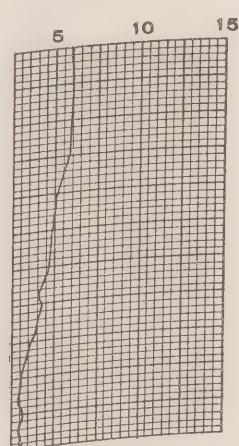
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50°02'N
144°55'W



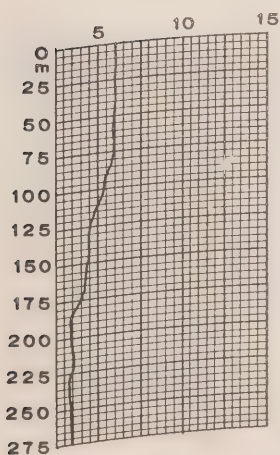
65-04-25-09.0
50°08'N
144°57'W



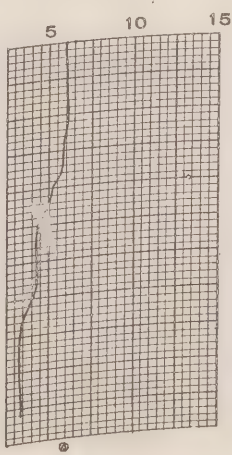
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144°53'W



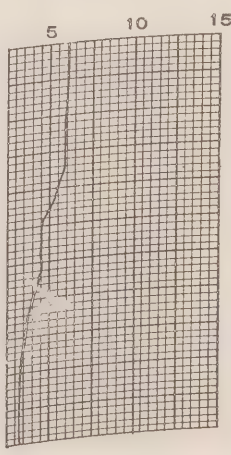
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49°54'N
144°55'W



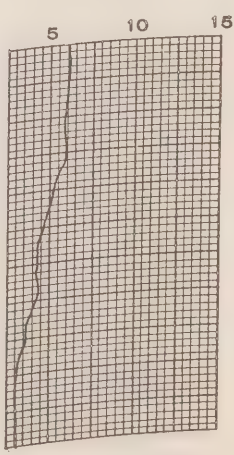
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49°50'N
145°00'W



65-04-25-21.0
49°53'N
144°57'W

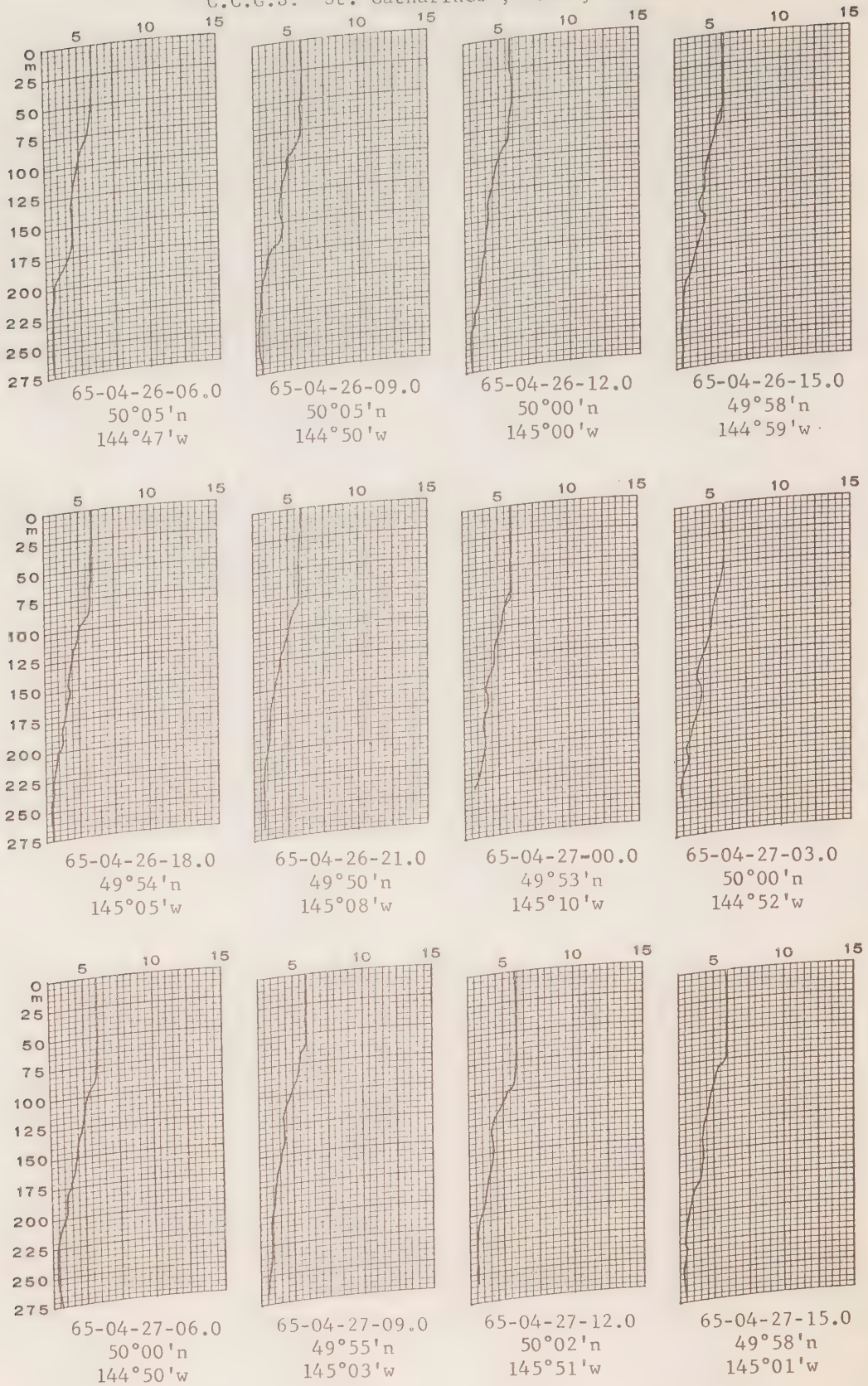


65-04-26-00.0
49°56'N
144°58'W

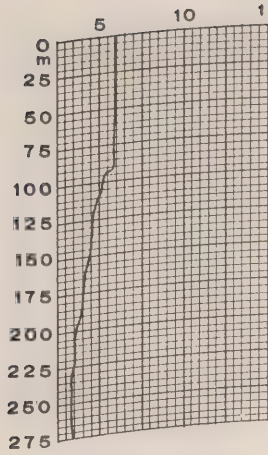


65-04-26-03.0
50°00'N
144°52'W

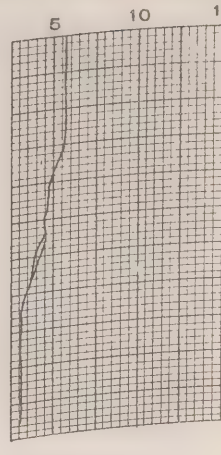
C.C.G.S. "St. Catharines", Survey P-65-2



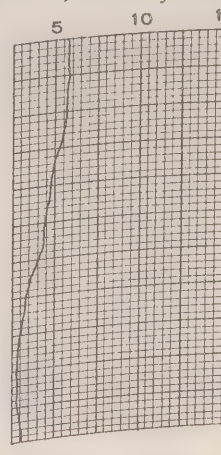
C.C.G.S. "St. Catharines", Survey P-65-2



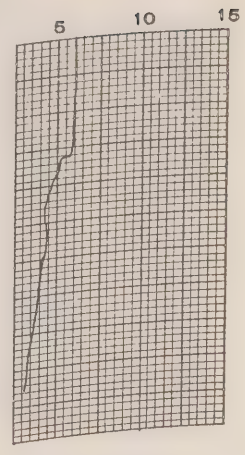
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50°00'n
145°05'w



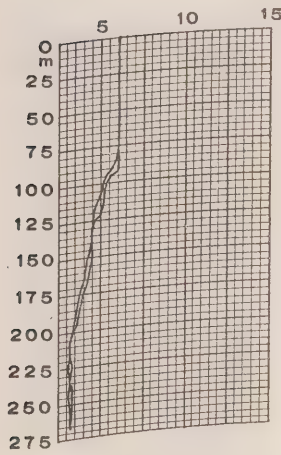
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50°07'n
145°20'w



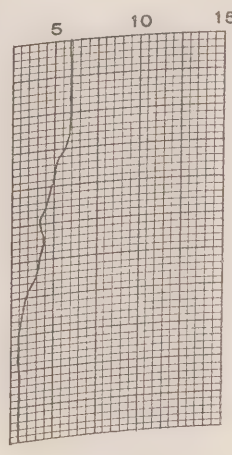
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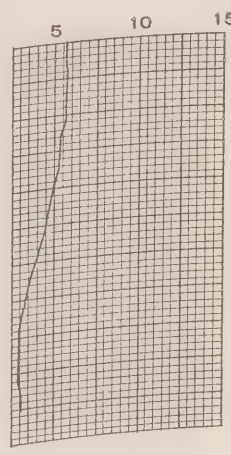
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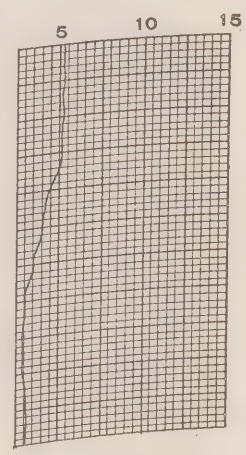
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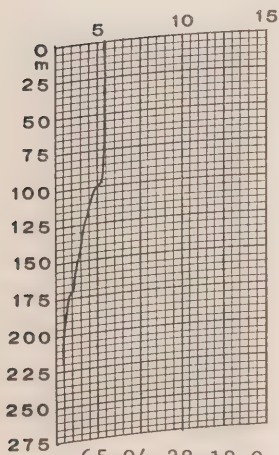
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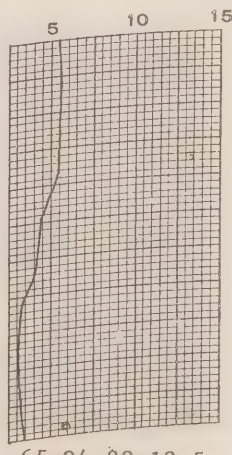
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145°07'w



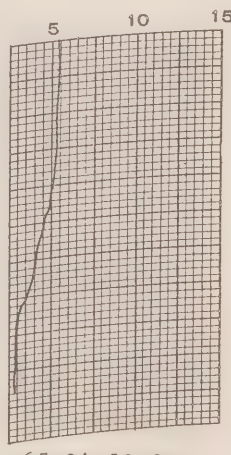
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145°15'w



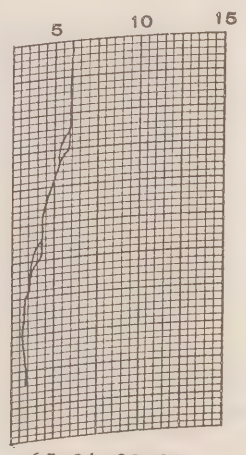
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145°30'w



65-04-28-18.5
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145°08'w

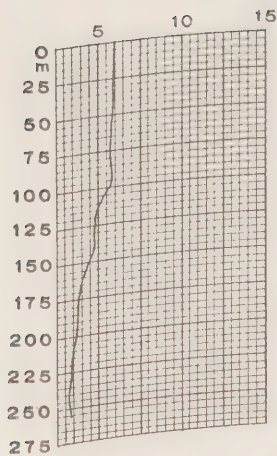


65-04-28-21.0
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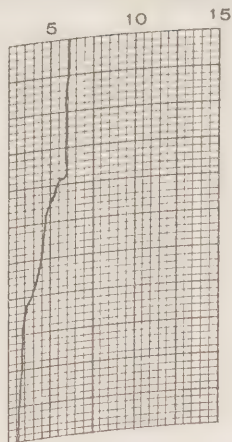


65-04-29-00.0
50°06'n
145°05'w

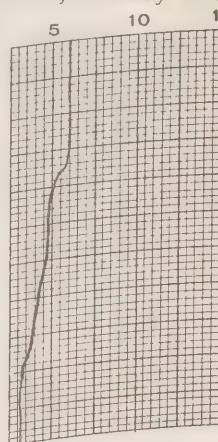
C.C.G.S. "St. Catharines", Survey P-65-2



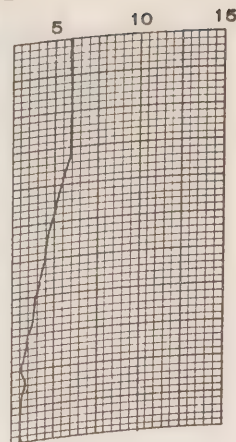
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144°48'W



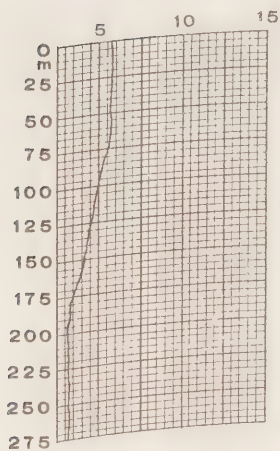
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49°46'N
144°40'W



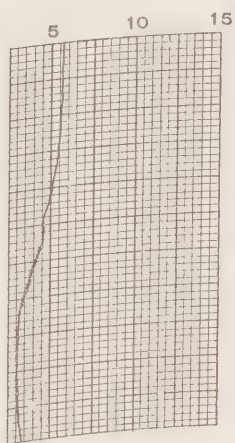
65-04-29-09.0
49°55'N
144°55'W



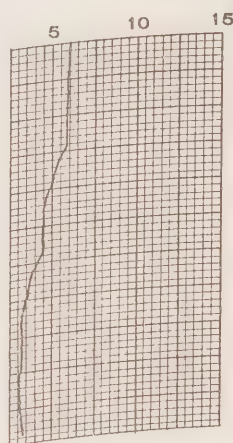
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49°59'N
144°54'W



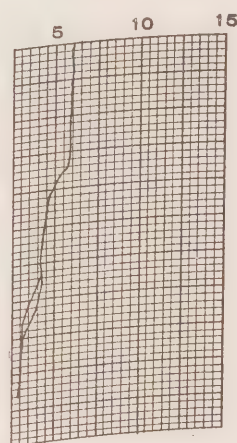
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49°59'N
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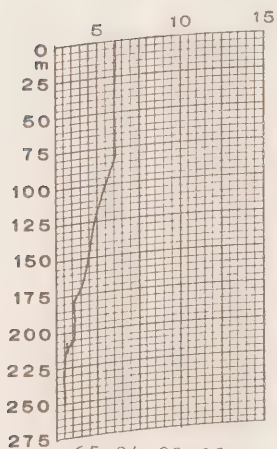
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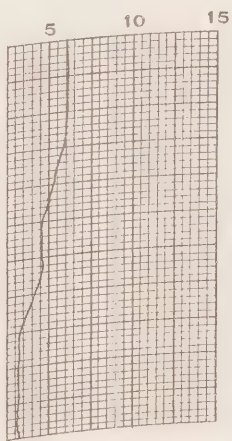
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49°59'N
145°08'W



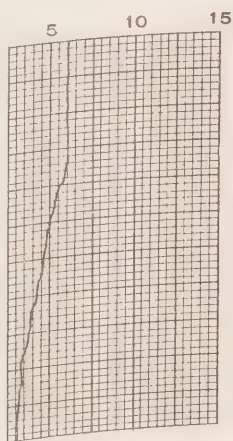
65-04-30-00.0
50°01'N
144°52'W



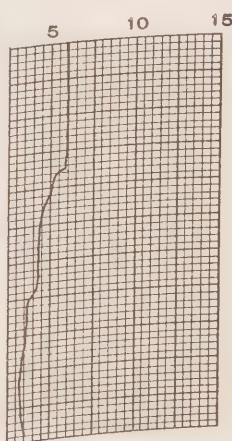
65-04-30-03.0
50°03'N
144°35'W



65-04-30-06.0
50°01'N
144°30'W

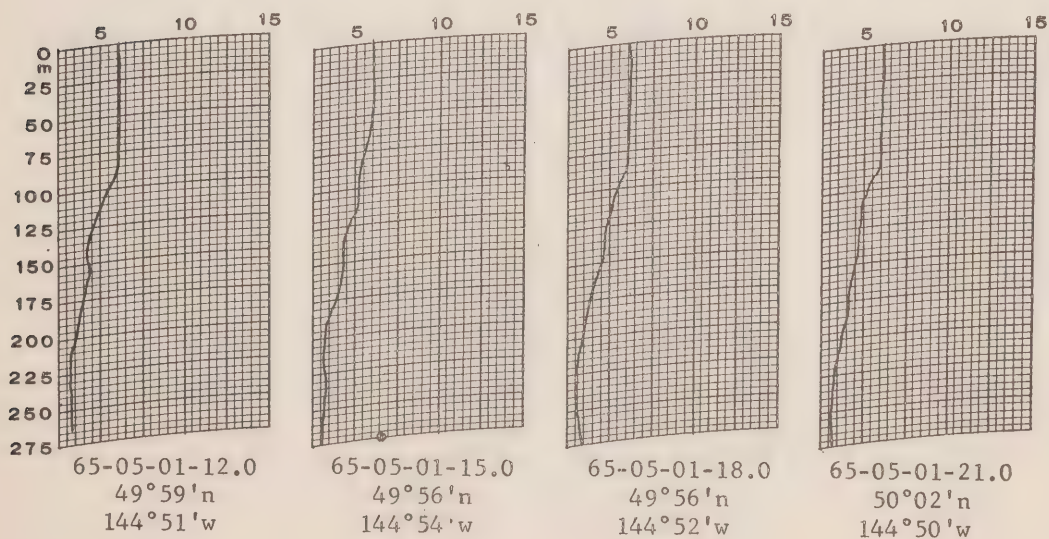
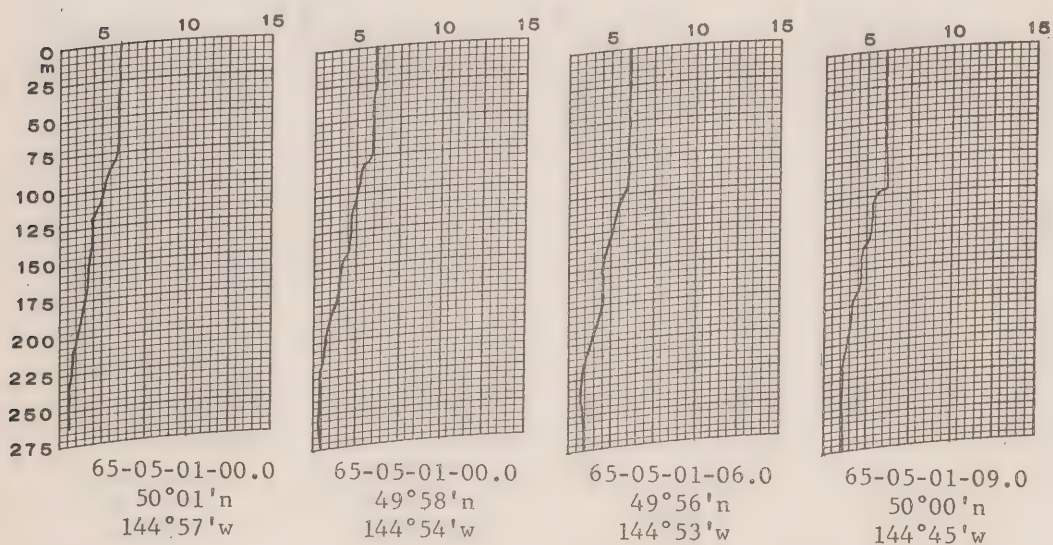
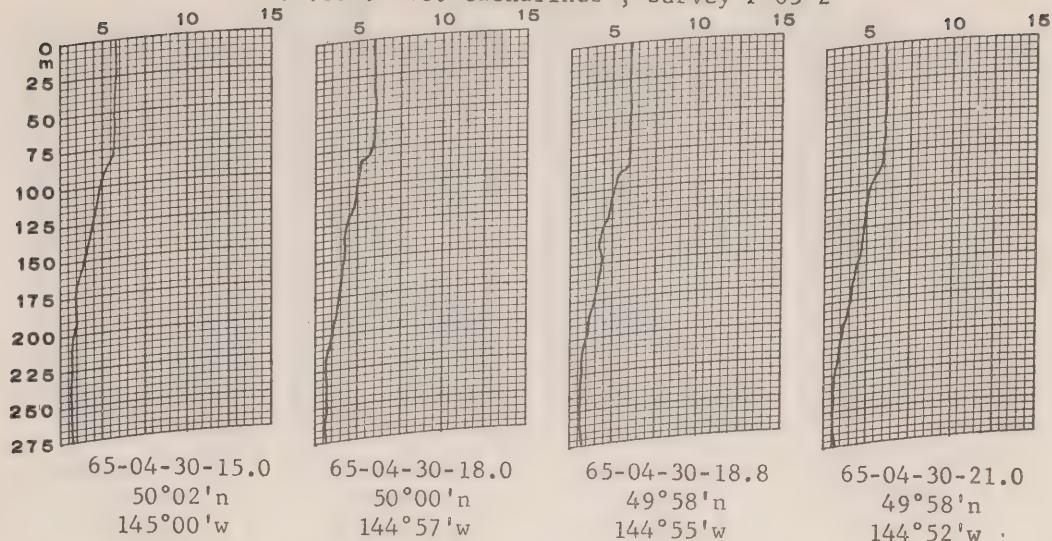


65-04-30-09.0
50°09'N
144°45'W

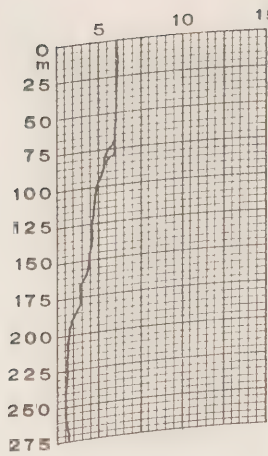


65-04-30-12.0
50°13'N
144°50'W

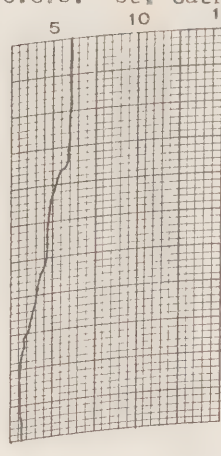
C.C.G.S. "St. Catharines", Survey P-65-2



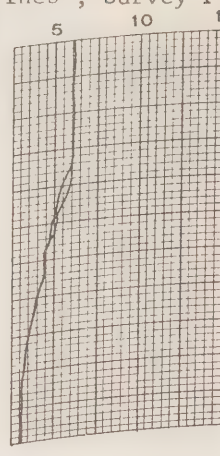
C.C.G.S. "St. Catharines", Survey P-65-2



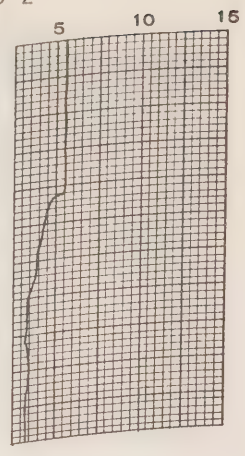
65-05-02-00.0
50°06'n
144°47'w



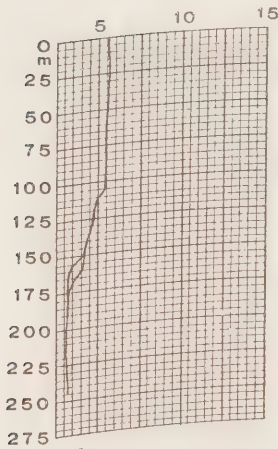
65-05-02-03.0
49°49'n
144°48'w



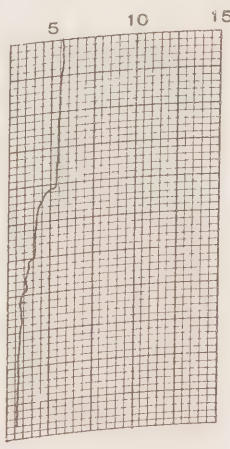
65-05-02-06.0
49°58'n
144°52'w



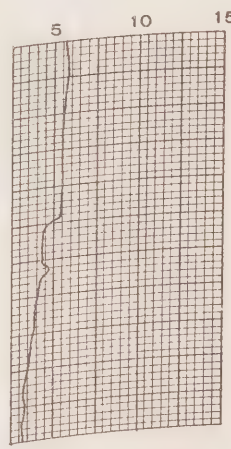
65-05-04-21.0
49°57'n
145°03'w



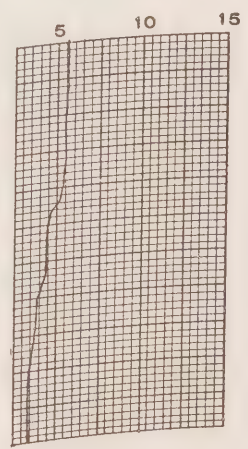
65-05-05-00.0
50°02'n
145°21'w



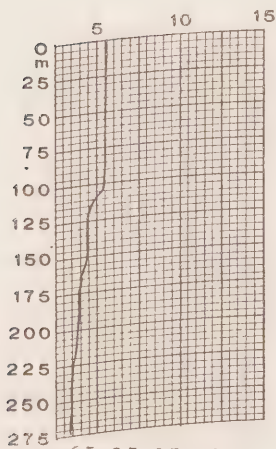
65-05-05-03.0
50°01'n
145°03'w



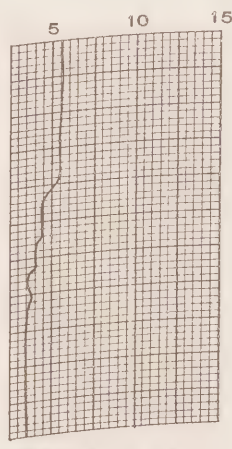
65-05-05-06.0
49°57'n
144°52'w



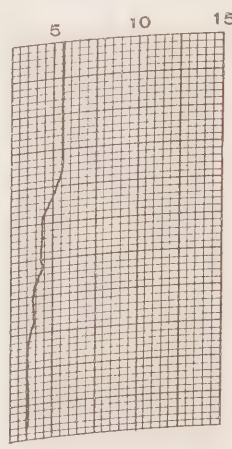
65-05-05-09.0
50°01'n
145°00'w



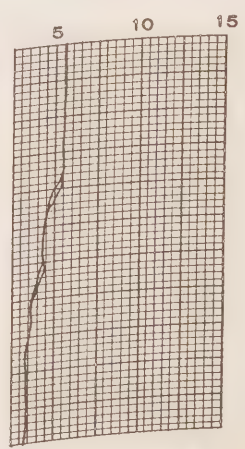
65-05-05-12.0
50°03'n
144°55'w



65-05-05-15.0
50°06'n
144°50'w

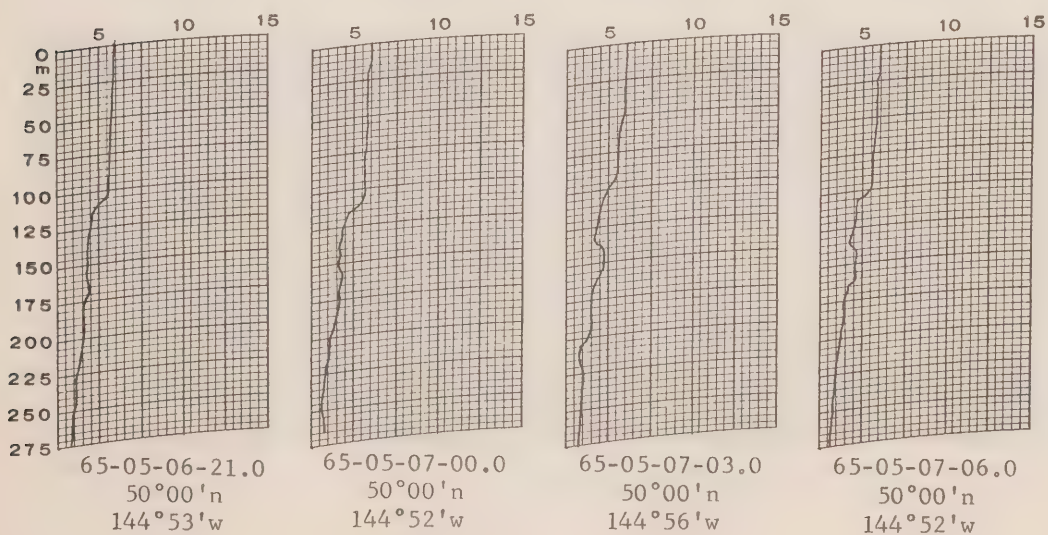
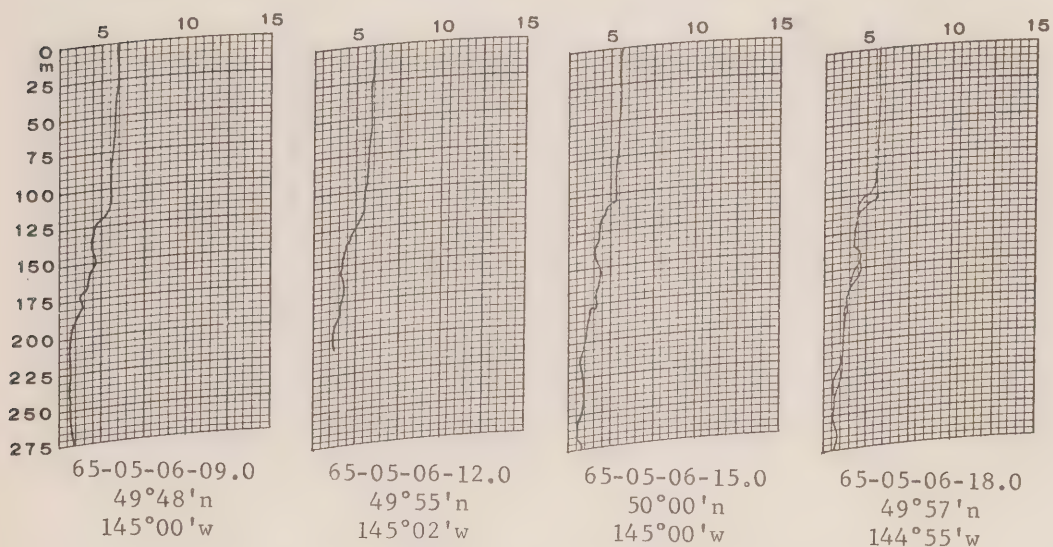
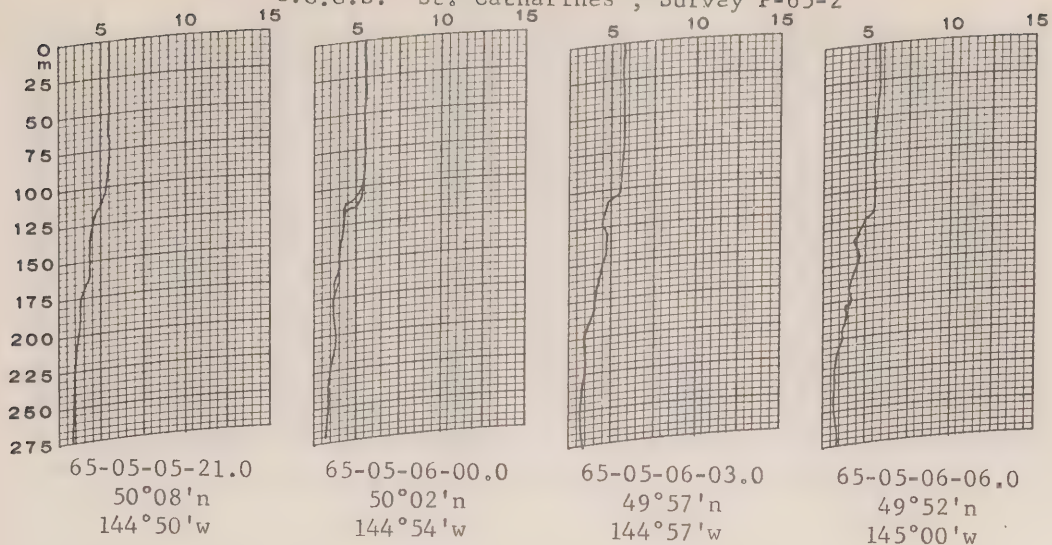


65-05-05-18.0
50°06'n
144°50'w

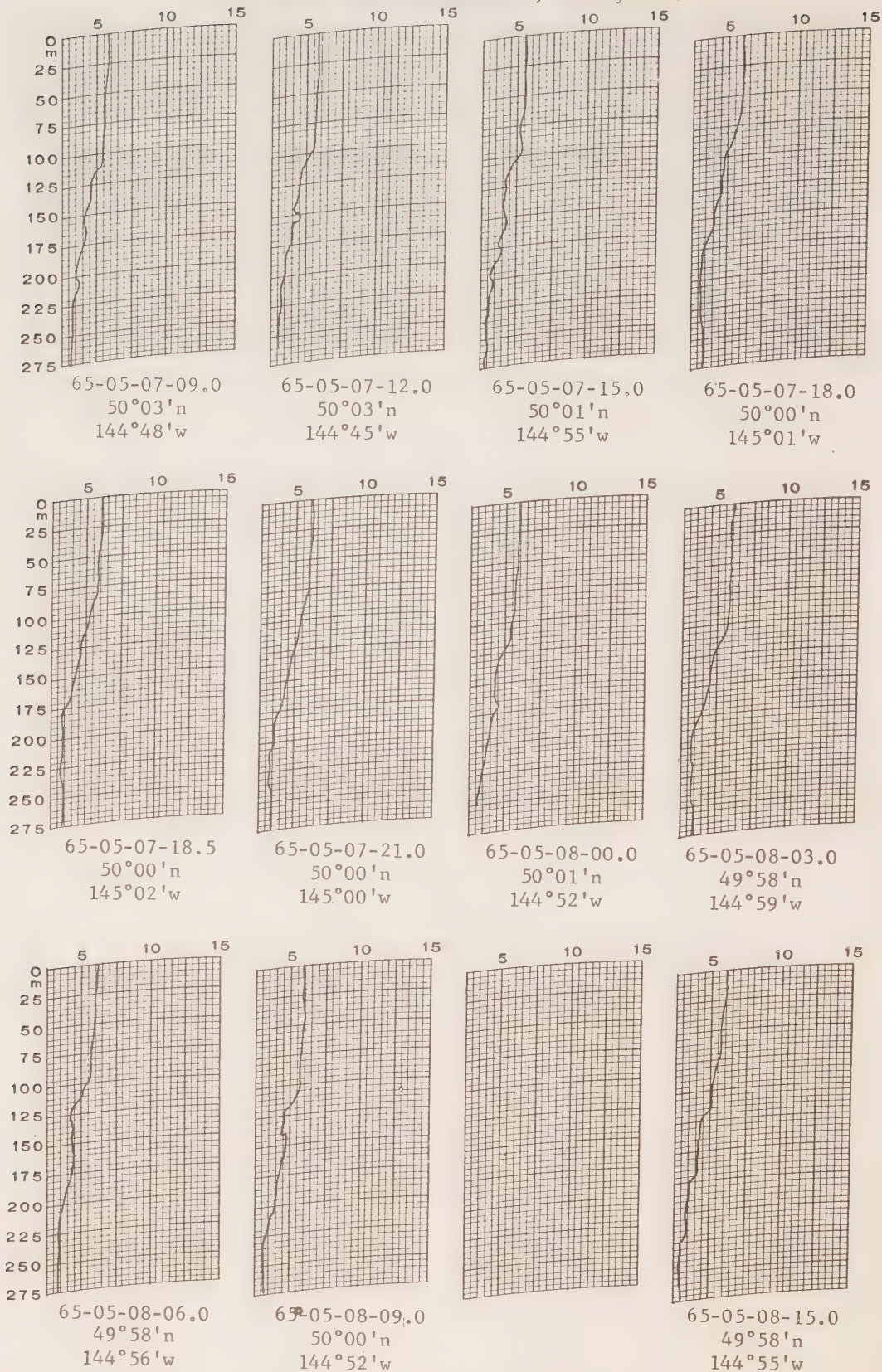


65-05-05-18.5
50°06'n
144°50'w

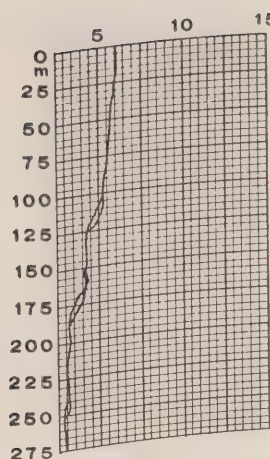
C.C.G.S. "St. Catharines", Survey P-65-2



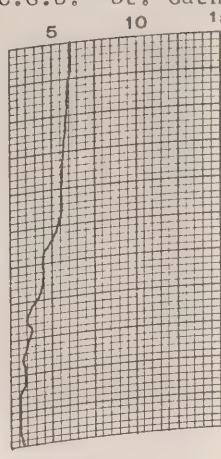
C.C.G.S. "St. Catharines", Survey P-65-2



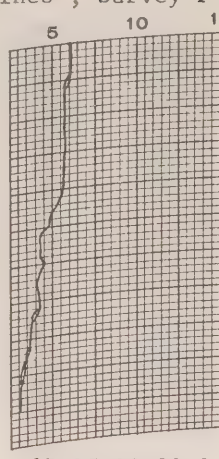
C.C.G.S. "St. Catharines", Survey P-65-2



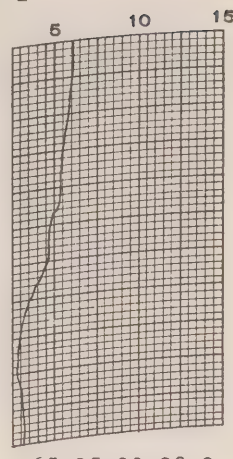
65-05-08-18.0
49°58'n
144°56'w



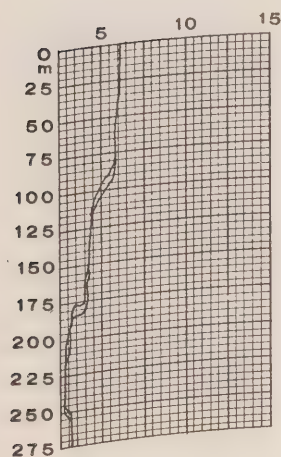
65-05-08-21.0
49°58'n
144°58'w



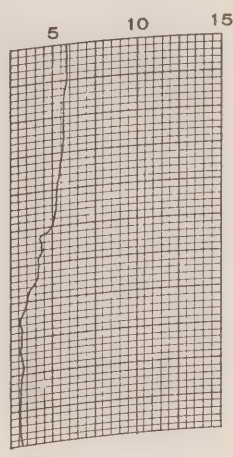
65-05-09-00.0
50°02'n
144°54'w



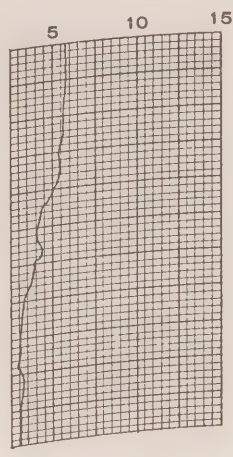
65-05-09-03.0
50°04'n
144°56'w



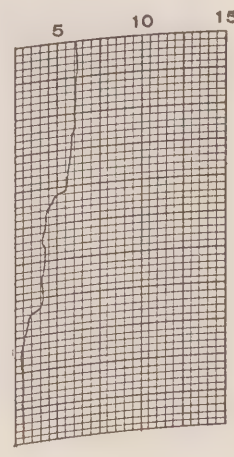
65-05-09-06.0
50°00'n
145°00'w



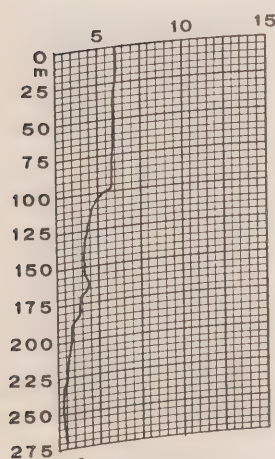
65-05-09-09.0
50°05'n
144°52'w



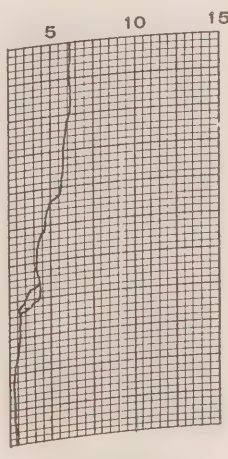
65-05-09-12.0
50°08'n
144°55'w



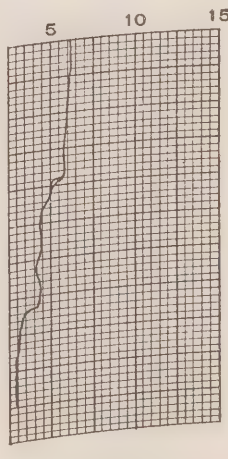
65-05-09-15.0
50°05'n
145°00'w



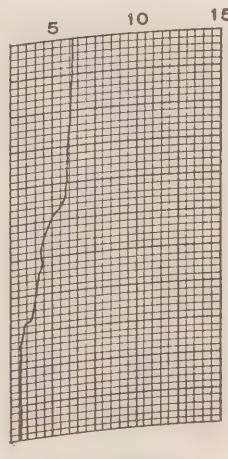
65-05-09-18.0
50°00'n
145°00'w



65-05-09-21.0
49°55'n
144°45'w

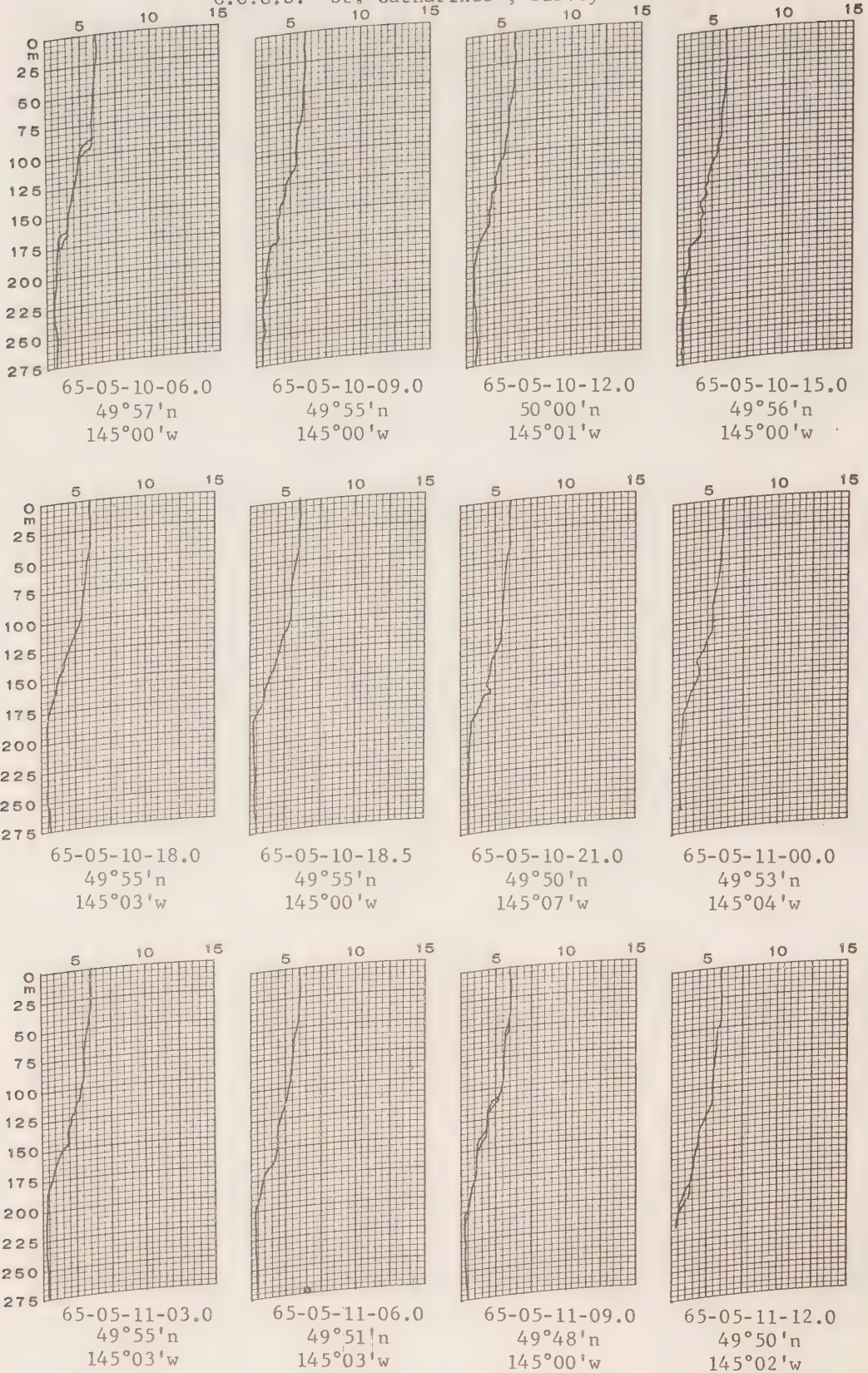


65-05-10-00.0
49°59'n
145°01'w

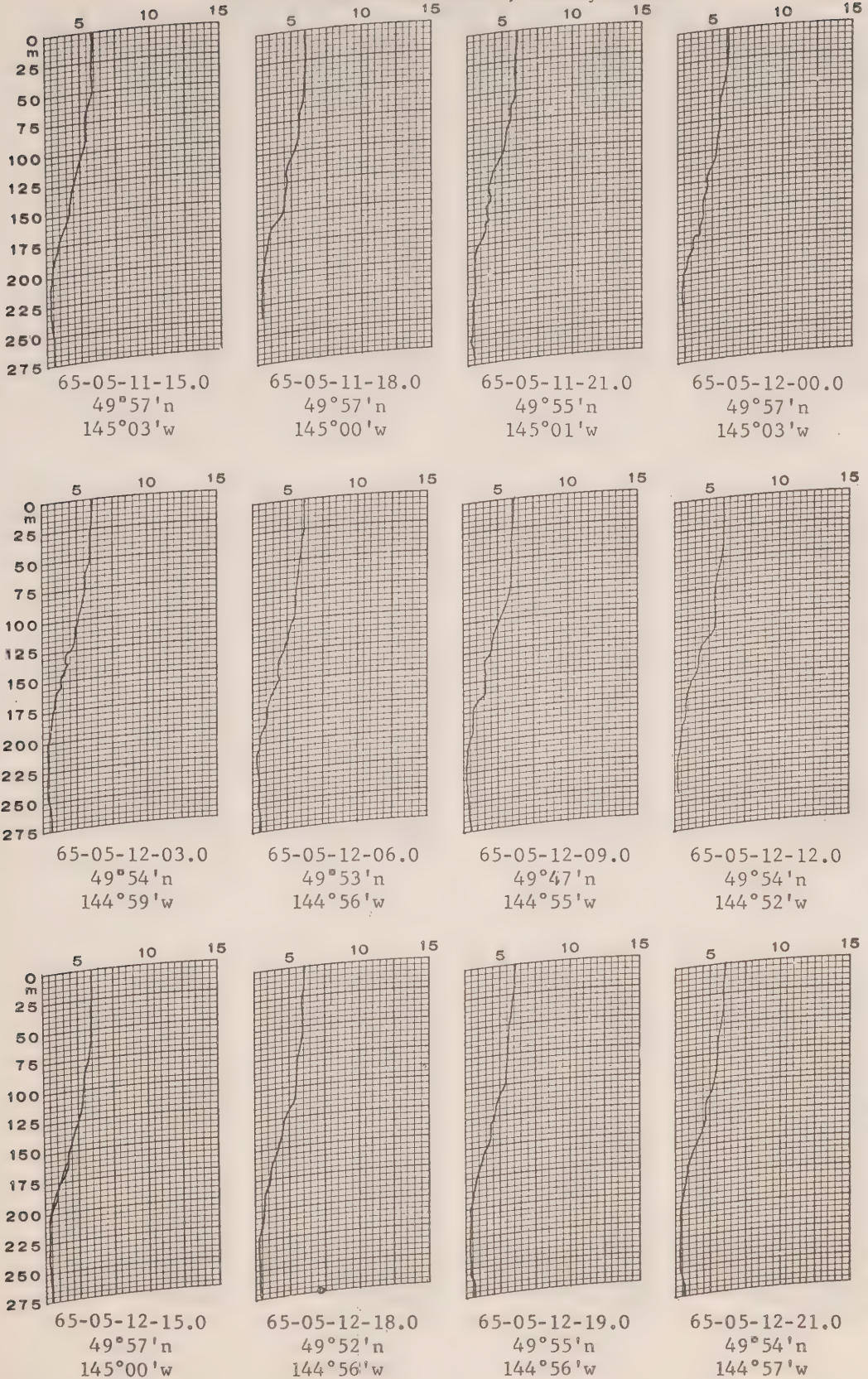


65-05-10-03.0
50°00'n
145°01'w

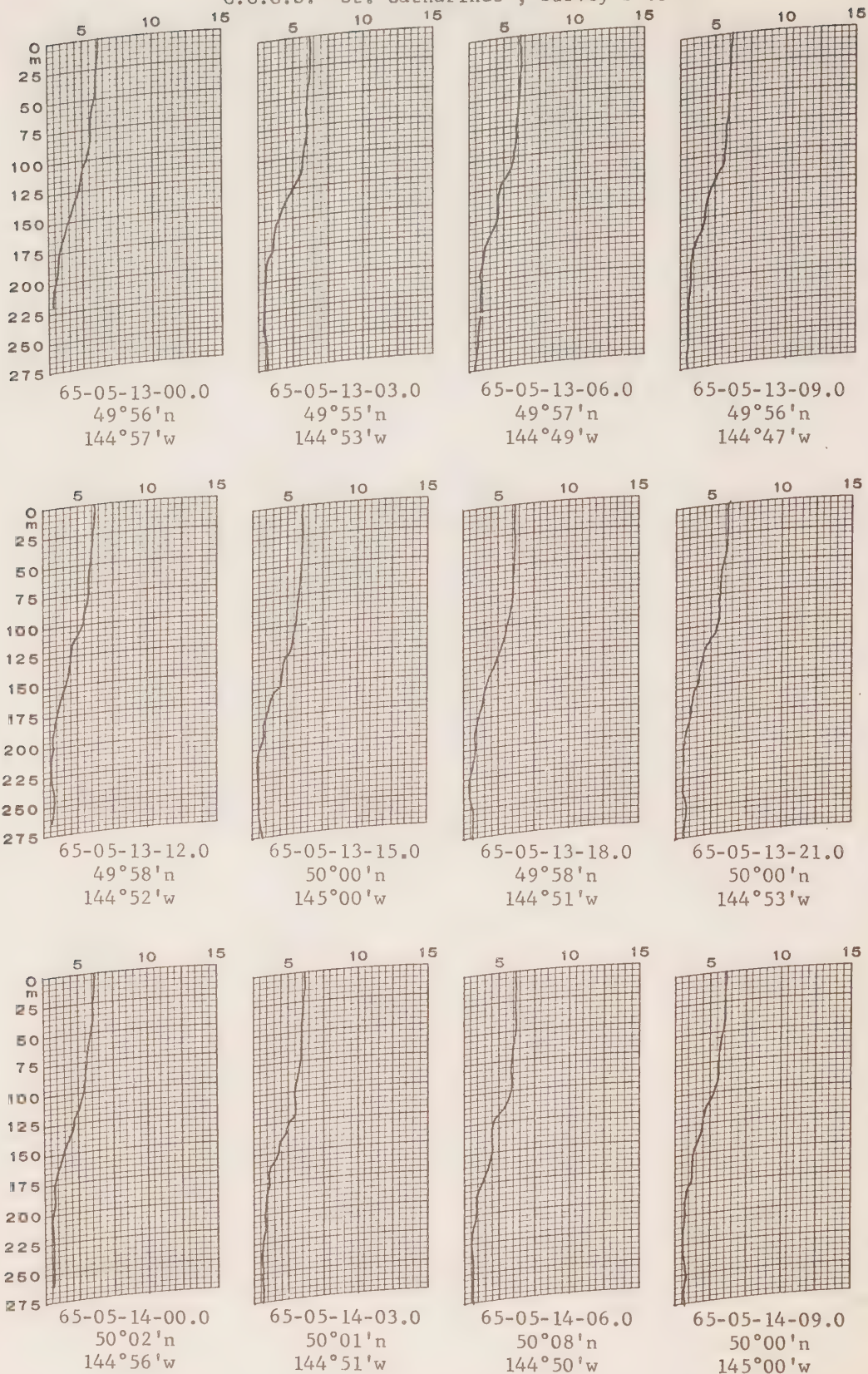
C.C.G.S. "St. Catharines", Survey P-65-2



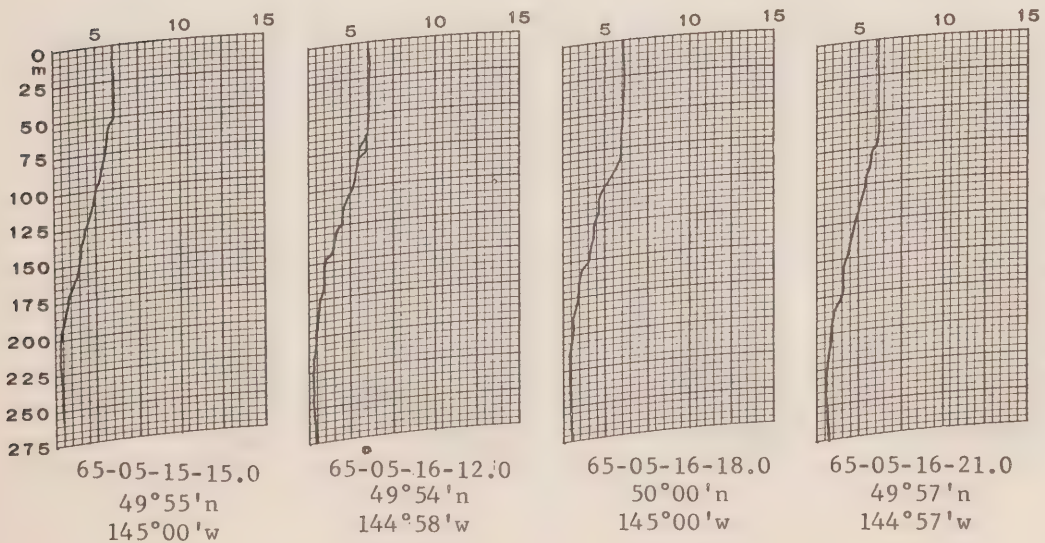
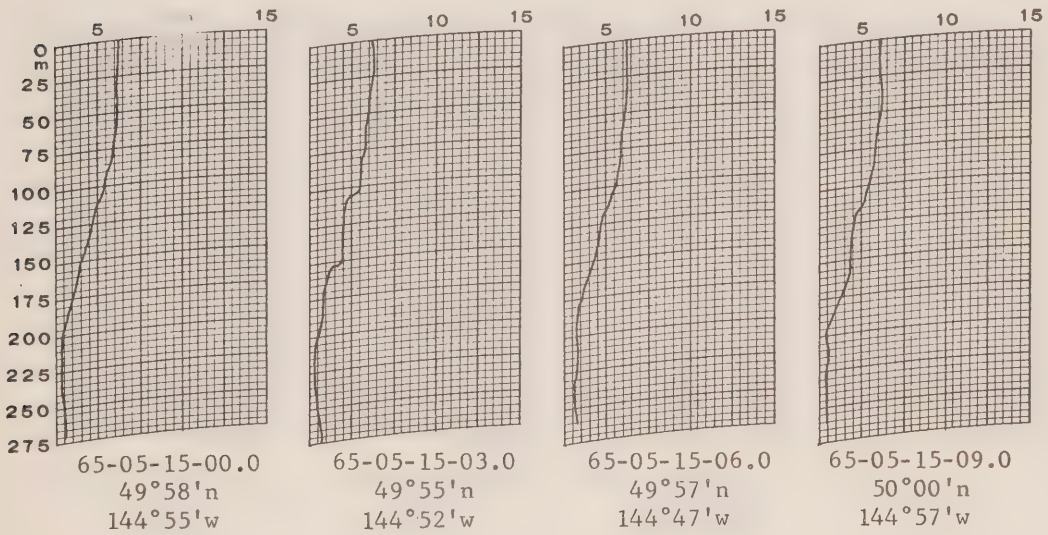
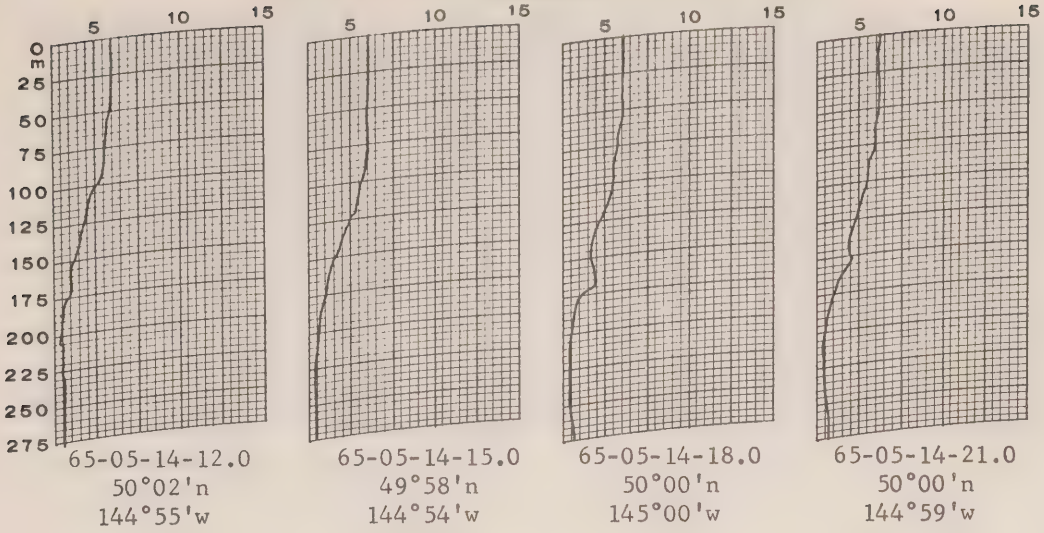
C.C.G.S. "St. Catharines", Survey P-65-2



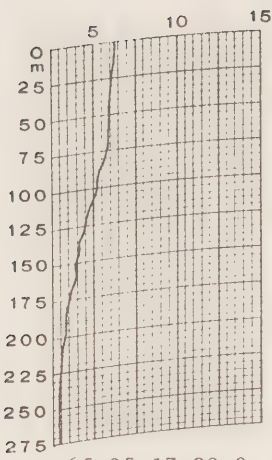
C.C.G.S. "St. Catharines", Survey P-65-2



C.C.G.S. "St. Catharines", Survey P-65-2



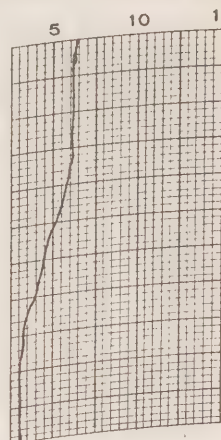
C.C.G.S. "St. Catharines", Survey P-65-2



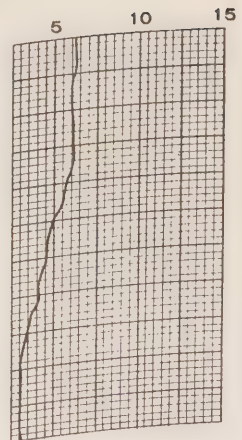
65-05-17-00.0
49°54'N
144°56'W



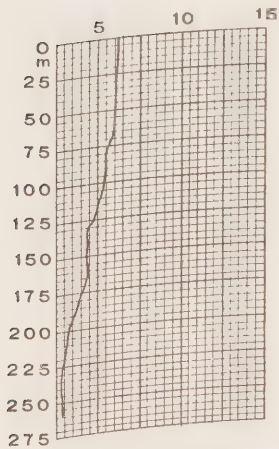
65-05-17-03.0
49°53'N
144°54'W



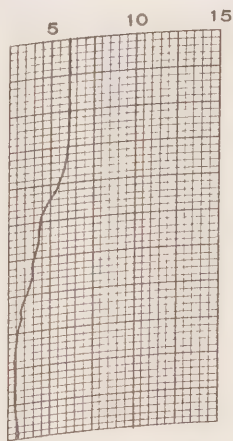
65-05-17-06.0
49°54'N
144°51'W



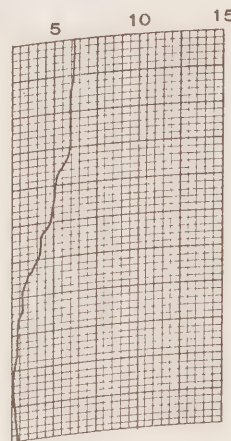
65-05-17-09.0
49°50'N
144°47'W



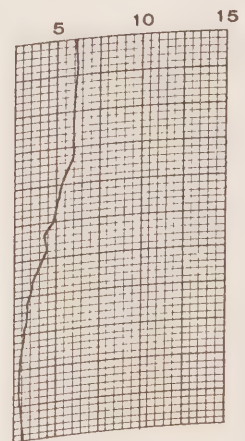
65-05-17-12.0
49°56'N
144°52'W



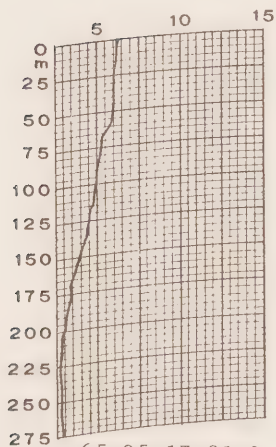
65-05-17-15.0
49°55'N
144°52'W



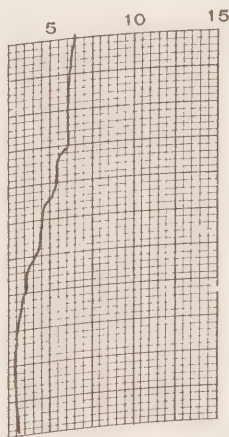
65-05-17-18.0
50°00'N
145°00'W



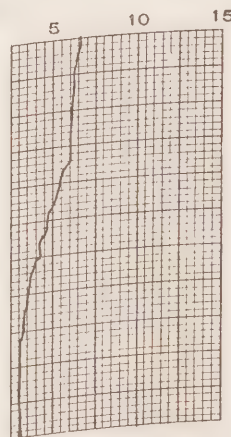
65-05-17-18.5
50°00'N
144°58'W



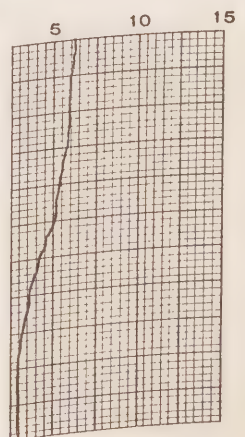
65-05-17-21.0
50°01'N
144°59'W



65-05-18-00.0
50°02'N
144°58'W

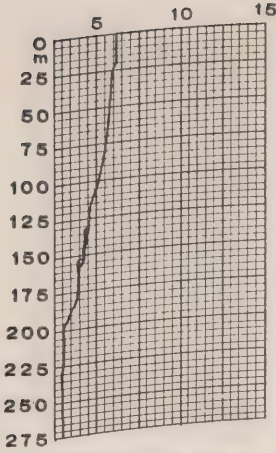


65-05-18-03.0
50°00'N
144°56'W

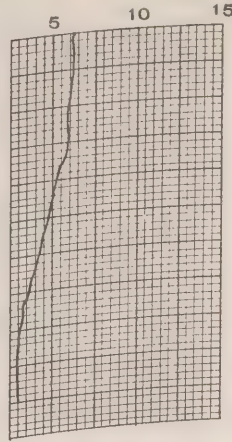


65-05-18-06.0
49°58'N
144°59'W

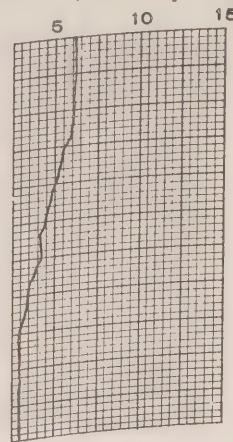
C.C.G.S. "St. Catharines", Survey P-65-2



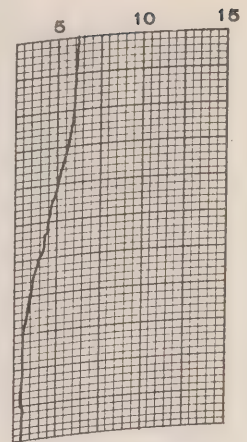
65-05-18-09.0
49°57'N
145°00'W



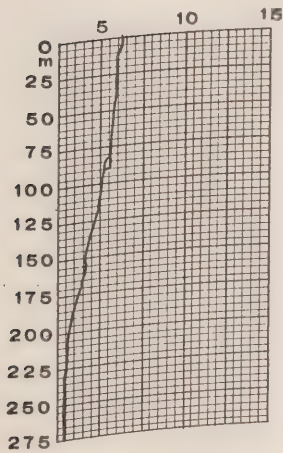
65-05-18-12.0
49°58'N
145°01'W



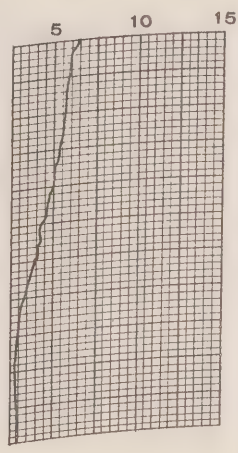
65-05-18-15.0
50°00'N
145°06'W



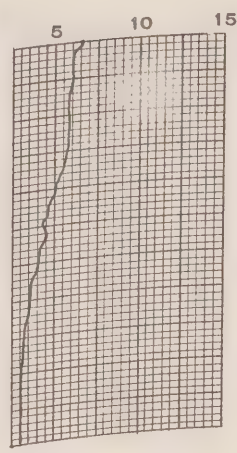
65-05-18-18.0
50°00'N
145°00'W



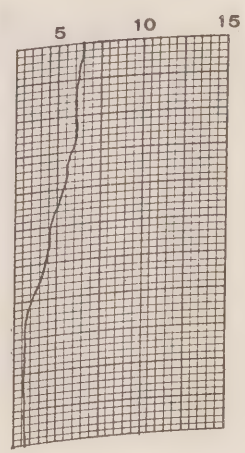
65-05-18-21.0
50°02'N
145°03'W



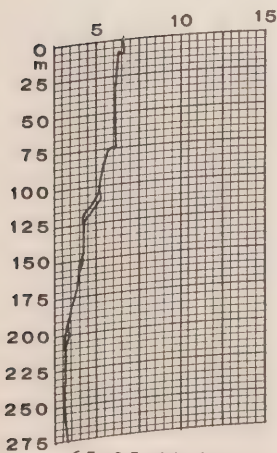
65-05-19-00.0
50°00'N
145°04'W



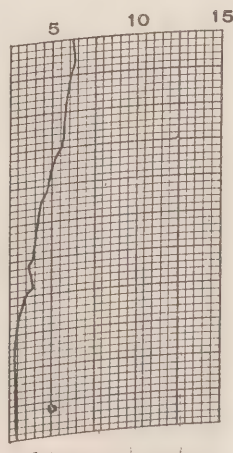
65-05-19-03.0
49°56'N
145°07'W



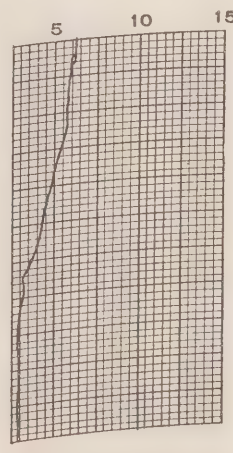
65-05-19-06.0
49°54'N
145°07'W



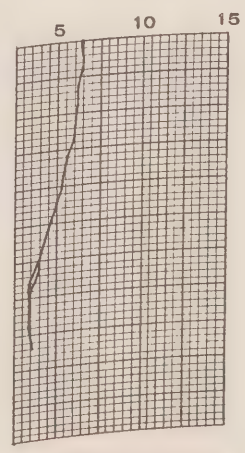
65-05-19-09.0
49°58'N
144°58'W



65-05-19-12.0
49°57'N
145°01'W

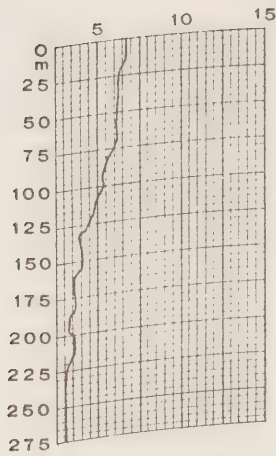


65-05-19-15.0
50°00'N
145°05'W

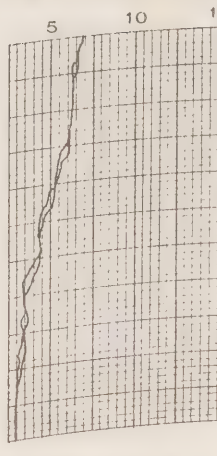


65-05-19-18.0
49°57'N
145°02'W

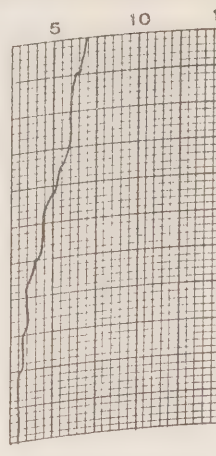
C.C.G.S. "St. Catharines", Survey P-65-2



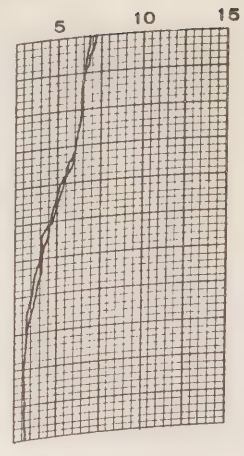
65-05-19-18.5
50°00'N
145°00'W



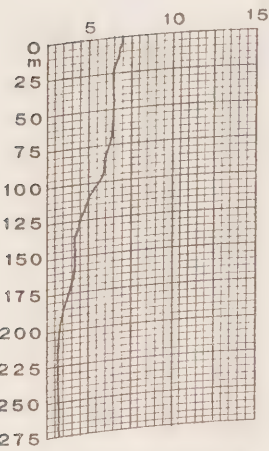
65-05-19-21.0
50°00'N
145°00'W



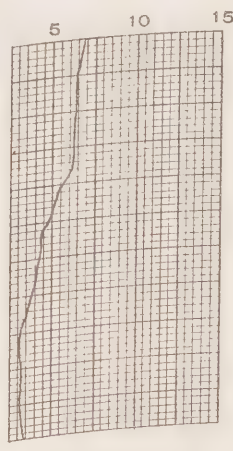
65-05-20-00.0
49°58'N
144°57'W



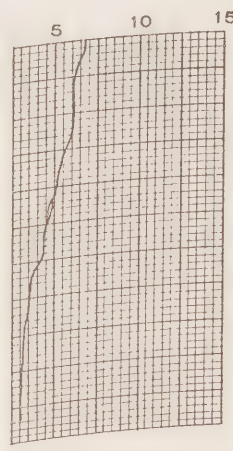
65-05-20-03.0
50°01'N
144°58'W



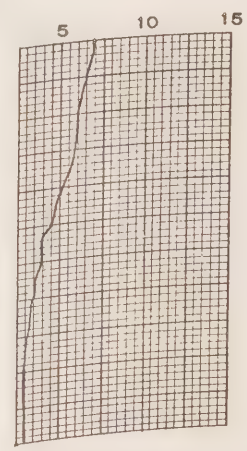
65-05-20-06.0
50°03'N
145°00'W



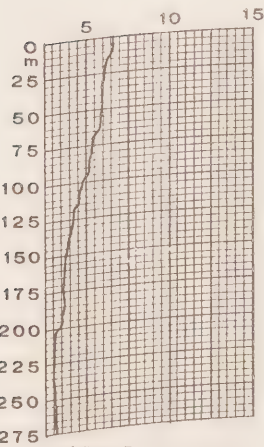
65-05-20-09.0
50°04'N
145°03'W



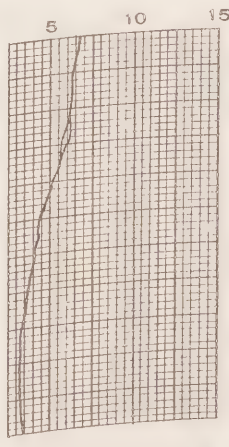
65-05-20-12.0
50°03'N
145°00'W



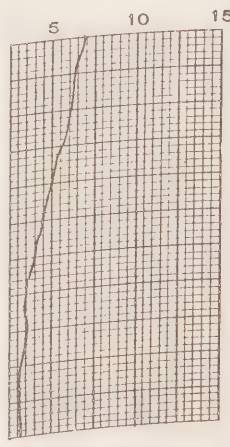
65-05-20-15.0
50°05'N
145°00'W



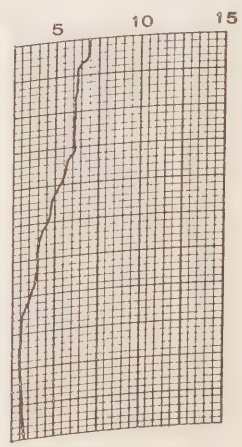
65-05-20-18.0
50°00'N
145°00'W



65-05-20-21.0
50°02'N
145°01'W

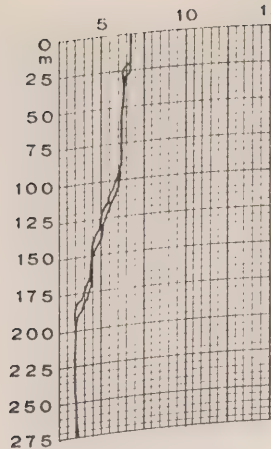


65-05-21-00.0
50°01'N
145°00'W

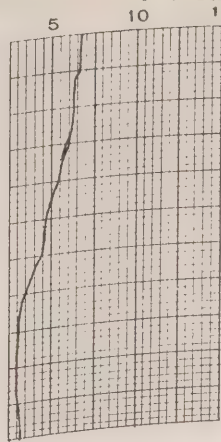


65-05-21-03.0
50°06'N
144°59'W

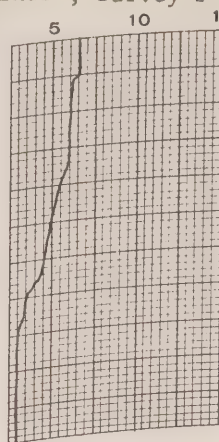
C.C.G.S. "St. Catharines", Survey P-65-2



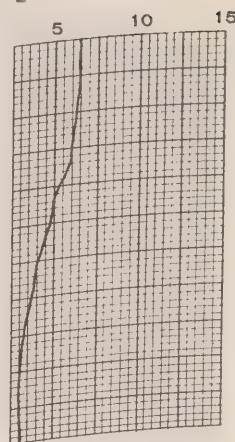
65-05-21-06.0
50°10'N
144°57'W



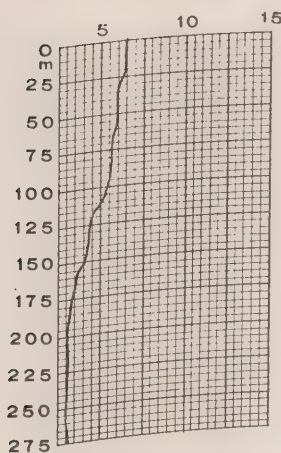
65-05-21-09.0
50°15'N
144°52'W



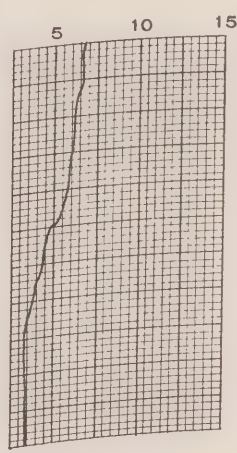
65-05-21-12.0
50°12'N
144°55'W



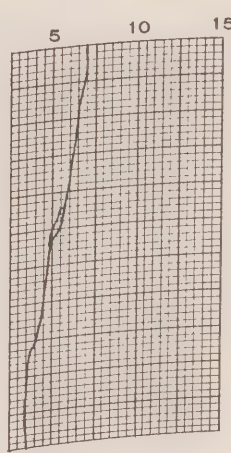
65-05-21-15.0
50°05'N
144°55'W



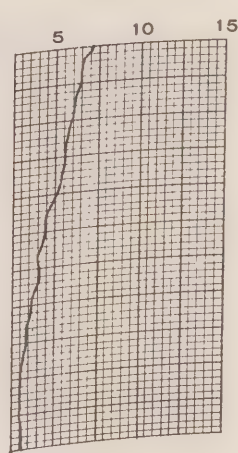
65-05-21-18.0
49°57'N
145°00'W



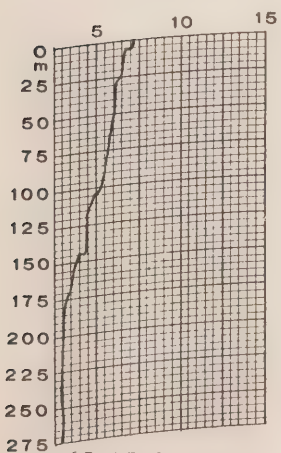
65-05-21-21.0
49°55'N
145°01'W



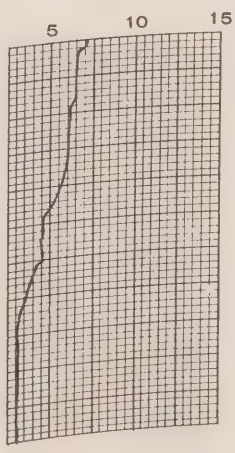
65-05-22-00.0
49°57'N
145°00'W



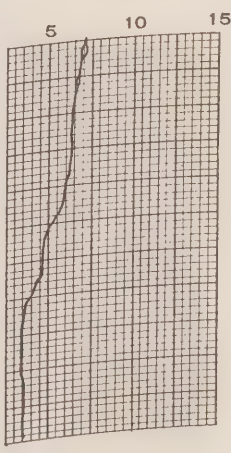
65-05-22-03.0
49°56'N
144°58'W



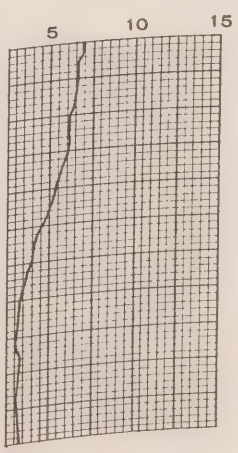
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49°57'N
144°55'W



65-05-22-09.0
49°56'N
144°56'W

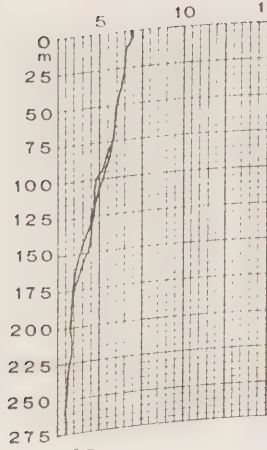


65-05-22-12.0
49°57'N
144°56'W

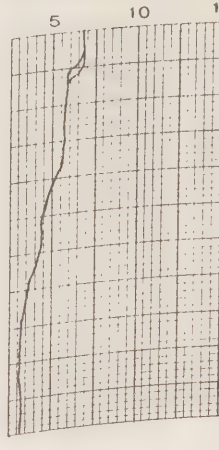


65-05-22-15.0
49°59'N
144°52'W

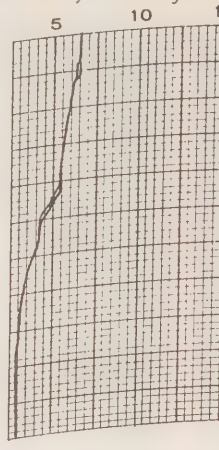
C.C.G.S. "St. Catharines", Survey P-65-2



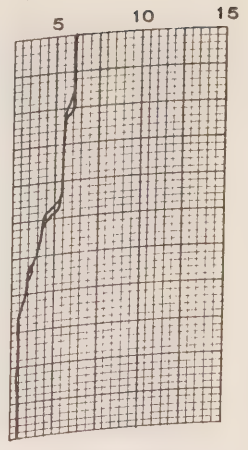
65-05-22-18.0
50°00'N
144°54'W



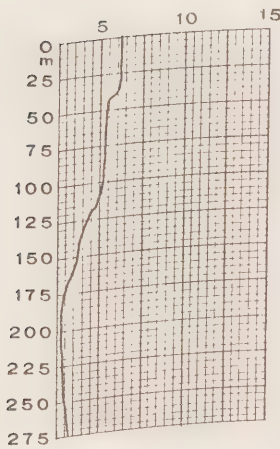
65-05-22-21.0
50°01'N
144°57'W



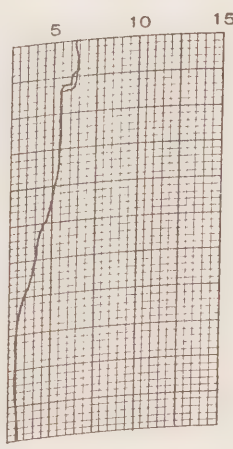
65-05-23-00.0
50°02'N
145°02'W



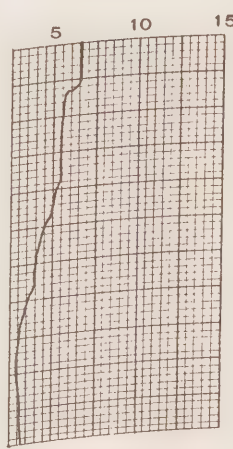
65-05-23-03.0
50°03'N
145°08'W



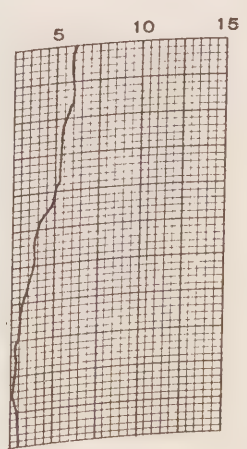
65-05-23-06.0
50°05'N
145°13'W



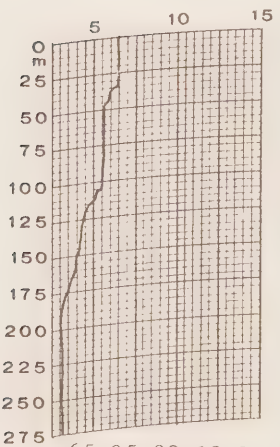
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50°08'N
145°15'W



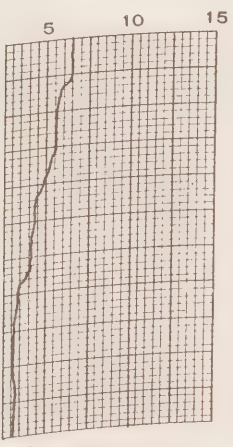
65-05-23-12.0
50°07'N
145°11'W



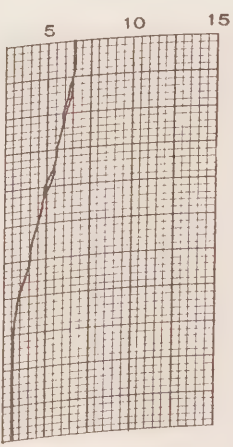
65-05-23-15.0
50°04'N
145°02'W



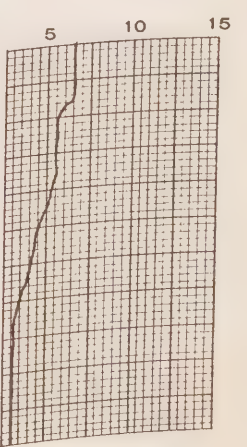
65-05-23-18.0
49°58'N
144°58'W



65-05-23-21.0
50°01'N
144°53'W

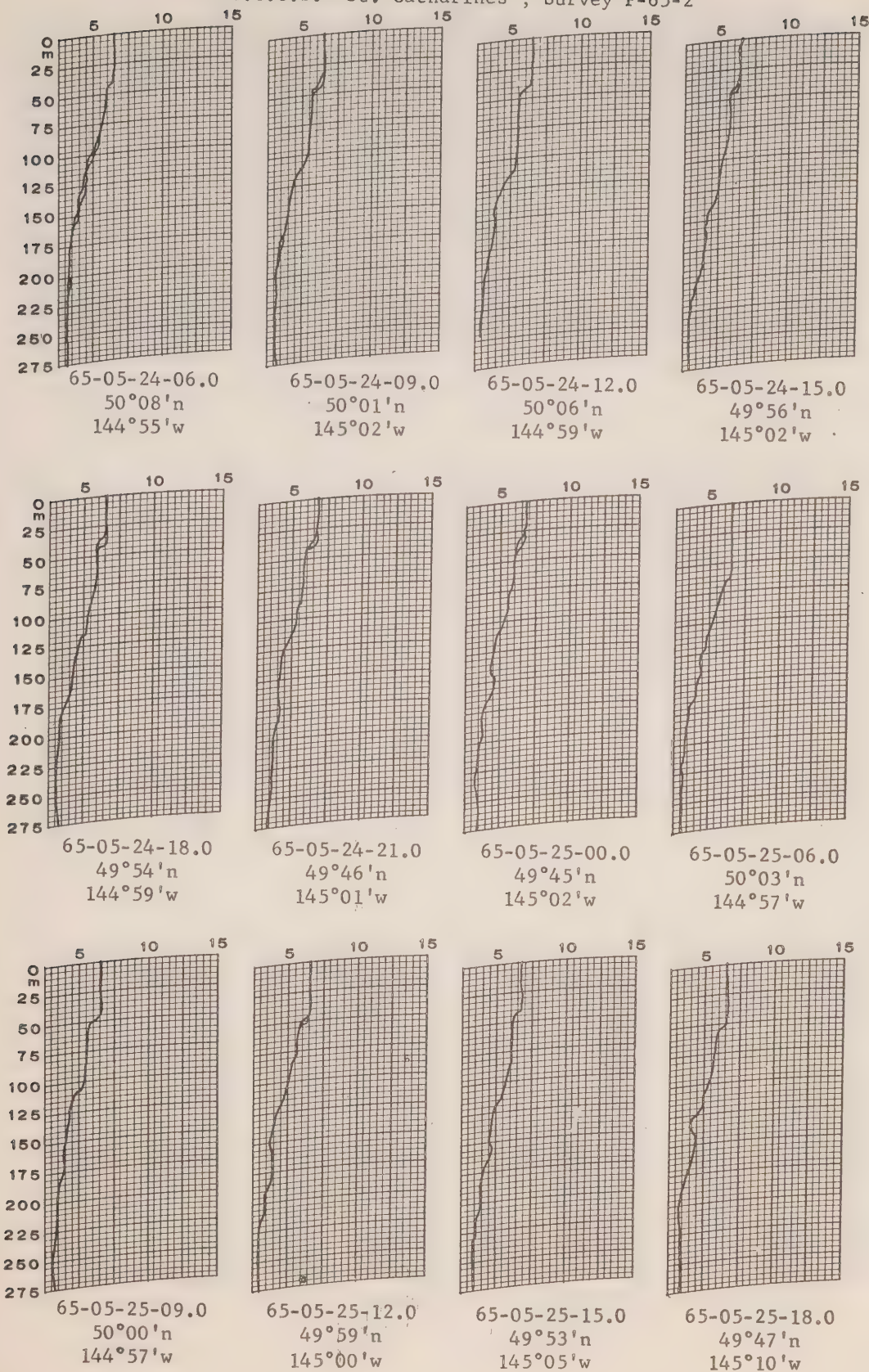


65-05-24-00.0
50°06'N
144°57'W

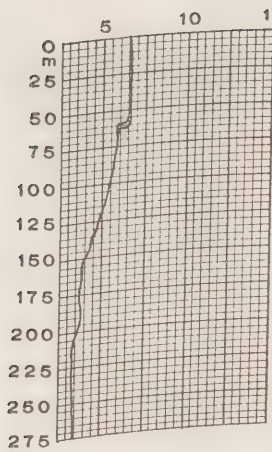


65-05-24-03.0
50°03'N
144°58'W

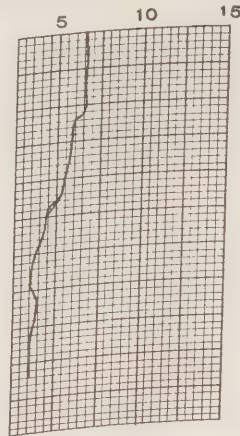
C.C.G.S. "St. Catharines", Survey P-65-2



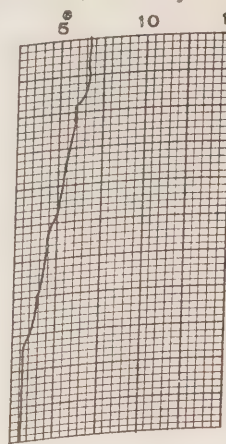
C.C.G.S. "St. Catharines", Survey P-65-2



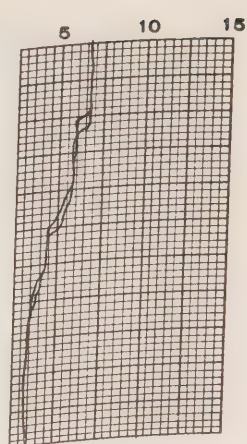
65-05-25-21.0
49°46'N
145°12'W



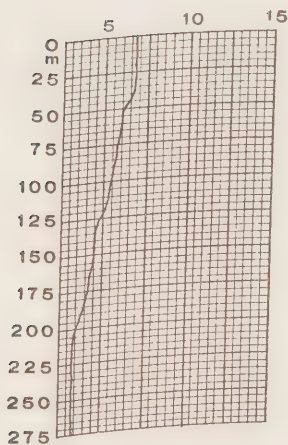
65-05-26-00.0
49°44'N
145°12'W



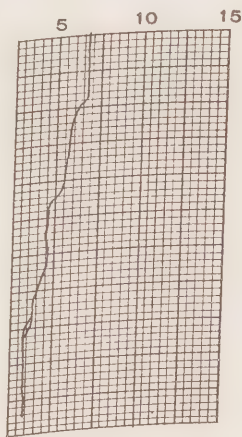
65-05-26-03.0
50°00'N
145°00'W



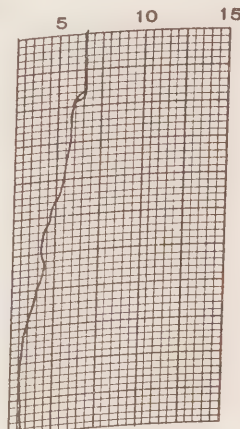
65-05-26-06.0
50°04'N
144°58'W



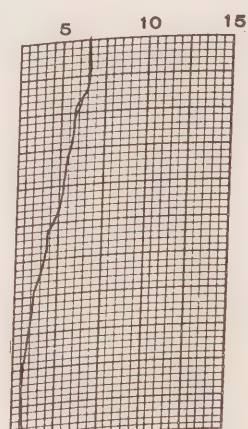
65-05-26-09.0
50°01'N
144°58'W



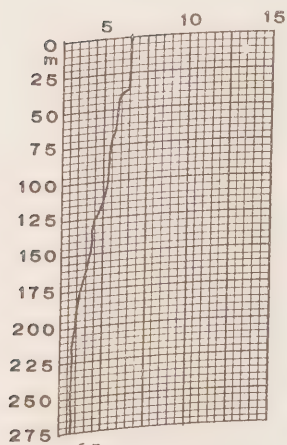
65-05-26-12.0
49°58'N
145°03'W



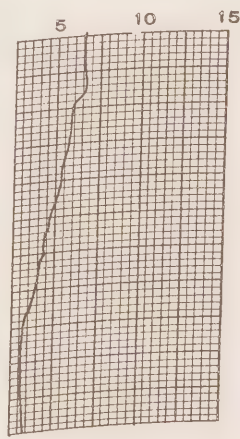
65-05-26-15.0
50°00'N
145°05'W



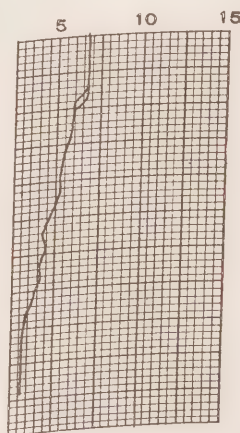
65-05-26-18.0
50°03'N
145°02'W



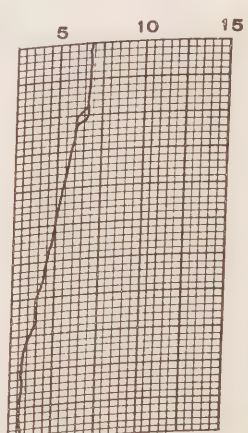
65-05-26-18.5
50°03'N
145°02'W



65-05-26-21.0
50°07'N
145°07'W

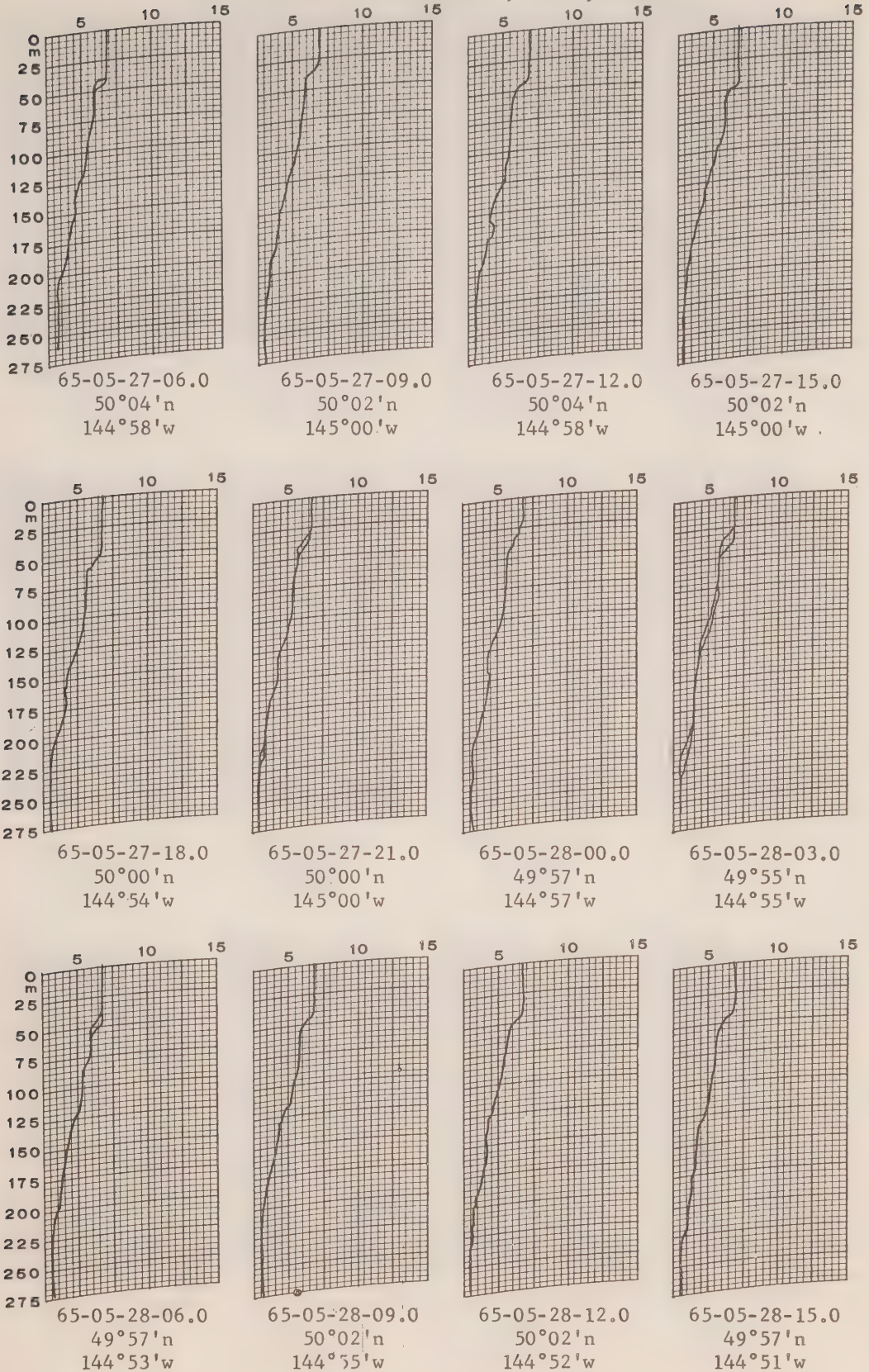


65-05-26-00.0
50°06'N
145°06'W

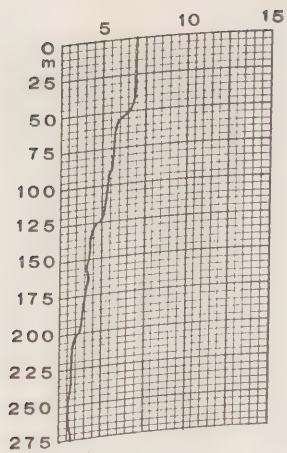


65-05-27-03.0
50°01'N
145°01'W

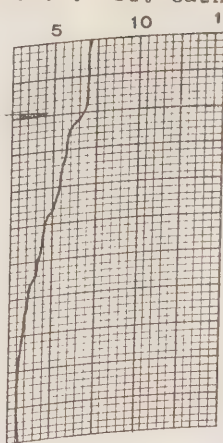
C.C.G.S. "St. Catharines", Survey P-65-2



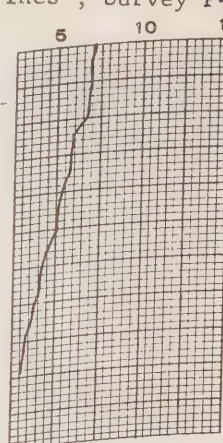
C.C.G.S. "St. Catharines", Survey P-65-2



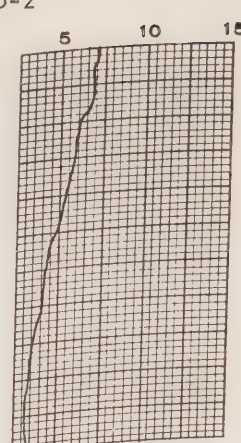
65-05-28-18.8
50°00'n
144°52'w



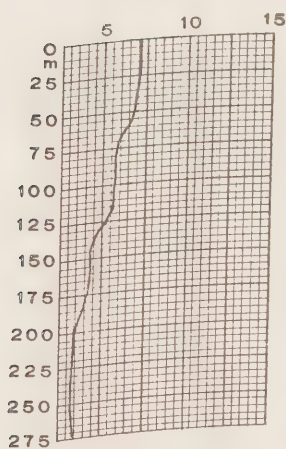
65-05-28-21.0
49°59'n
144°52'w



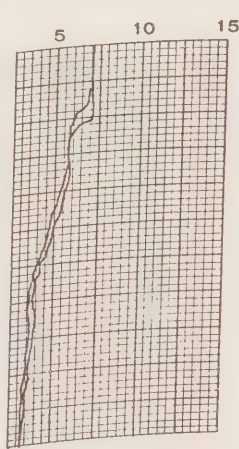
65-05-29-00.0
49°58'n
144°53'w



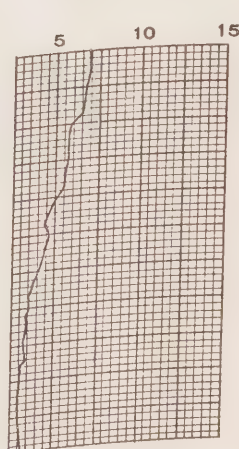
65-05-29-03.0
50°00'n
144°55'w



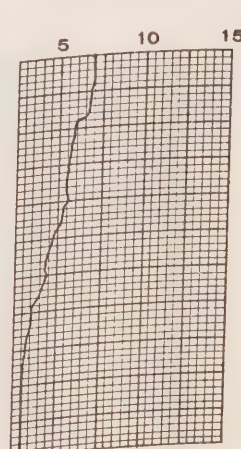
65-05-29-06.0
49°59'n
144°45'w



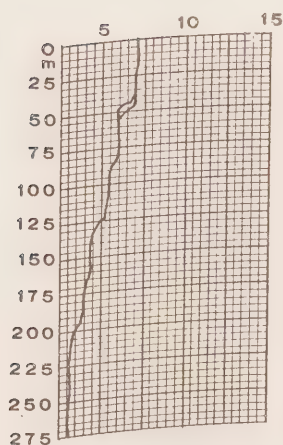
65-05-29-09.0
50°01'n
145°04'w



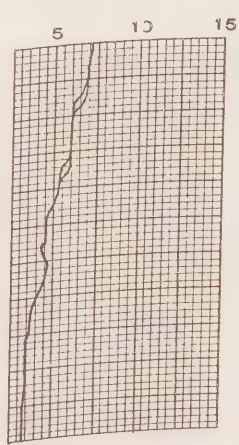
65-05-29-12.0
50°03'n
145°04'w



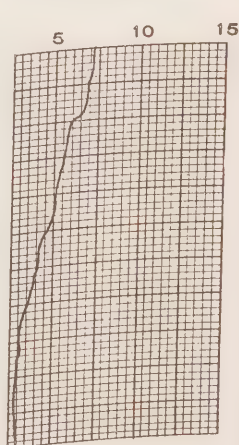
65-05-29-15.0
50°00'n
145°00'w



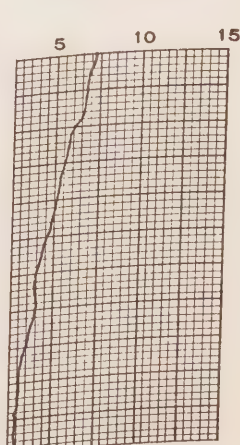
65-05-29-18.0
50°05'n
144°55'w



65-05-29-21.0
50°03'n
144°56'w

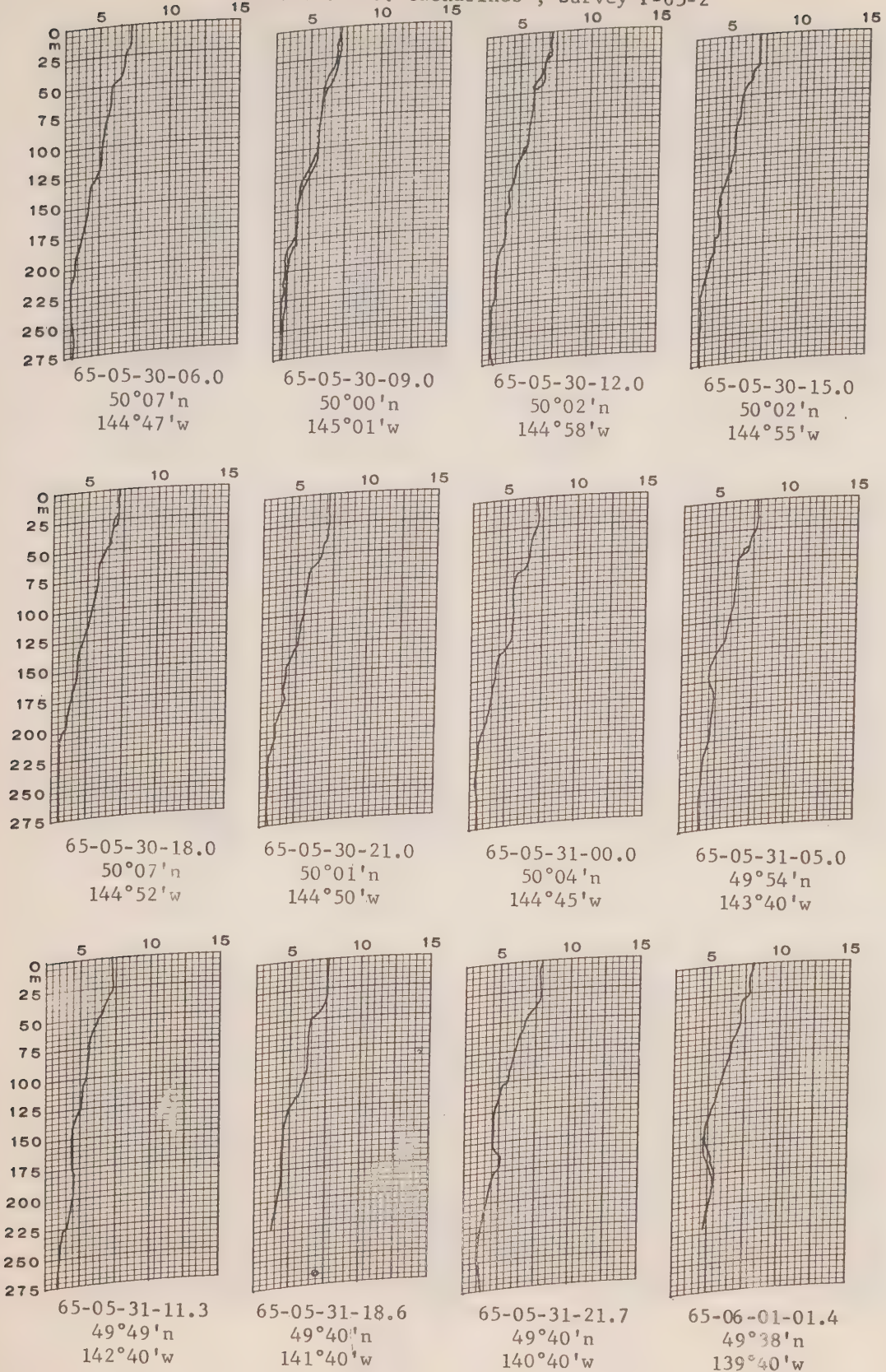


65-05-30-00.0
50°03'n
144°55'w

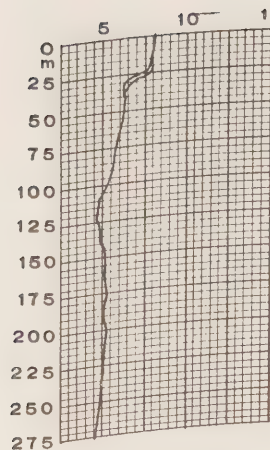


65-05-30-03.0
50°02'n
144°53'w

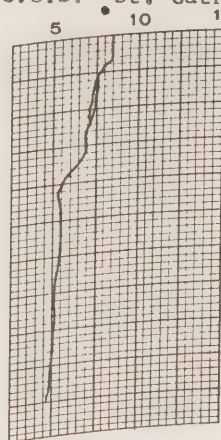
C.C.G.S. "St. Catharines", Survey P-65-2



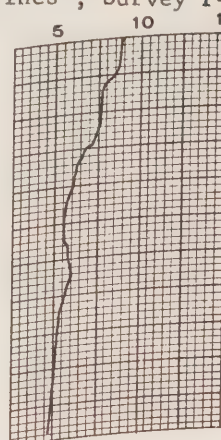
C.C.G.S. "St. Catharines", Survey P-65-2



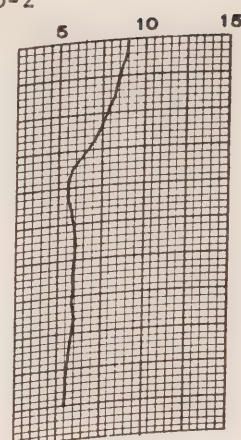
65-06-01-04.4
49°34'n
138°40'w



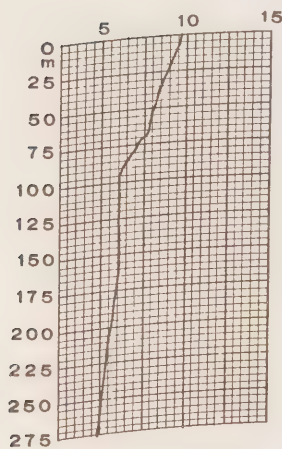
65-06-01-15.5
49°23'n
135°40'w



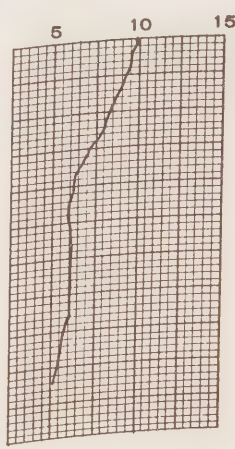
65-06-01-18.5
49°19'n
134°40'w



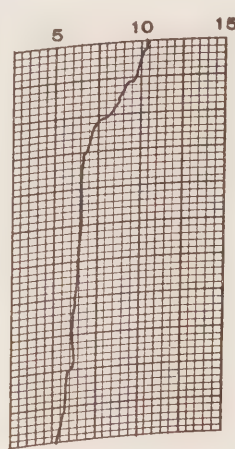
65-06-01-21.9
49°15'n
133°40'w



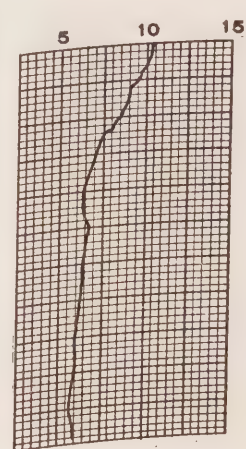
65-06-02-00.8
49°10'n
132°40'w



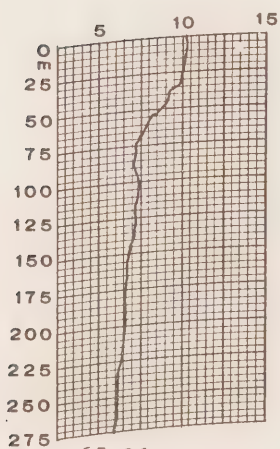
65-06-02-04.2
49°05'n
131°40'w



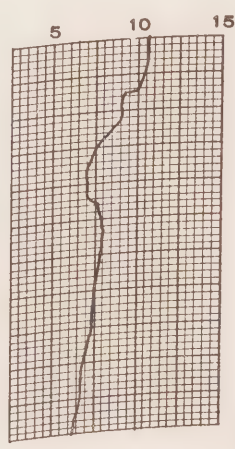
65-06-02-07.2
49°02'n
130°40'w



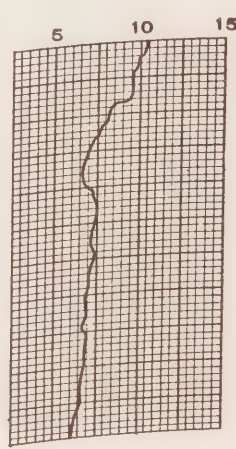
65-06-02-11.0
48°55'n
129°40'w



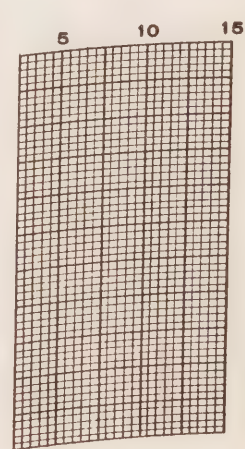
65-06-02-14.0
48°51'n
128°40'w



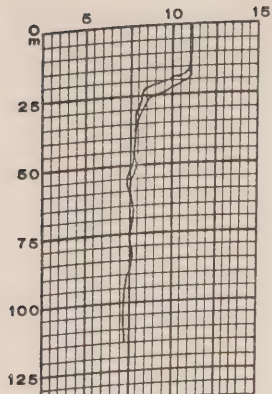
65-06-02-17.4
48°47'n
127°40'w



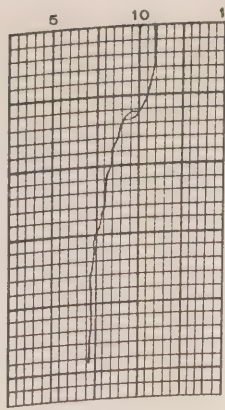
65-06-02-21.3
48°42'n
126°40'w



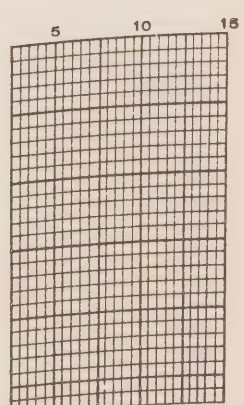
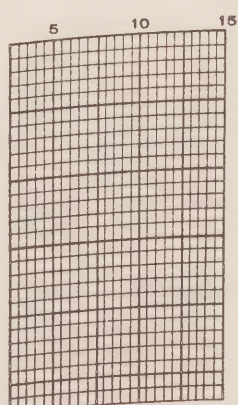
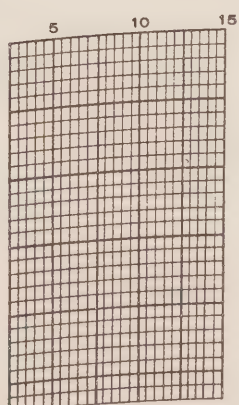
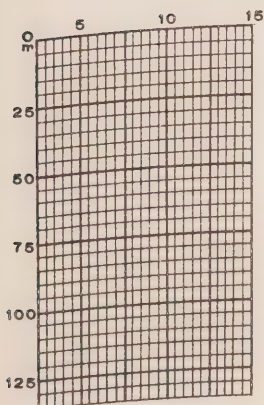
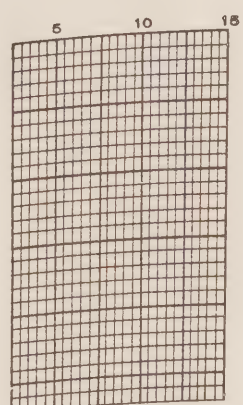
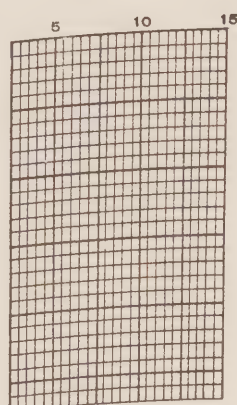
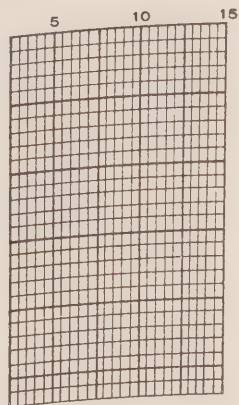
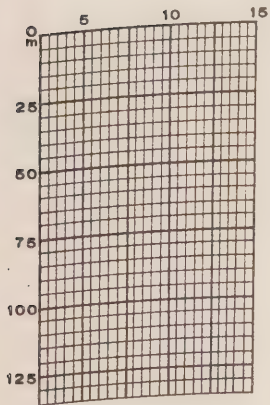
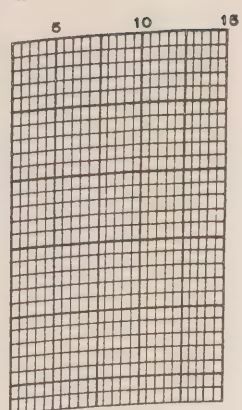
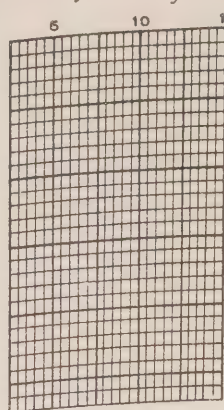
C.C.G.S. "St. Catharines", Survey P-65-2



65-06-03-00.4
48°38'n
126°00'w



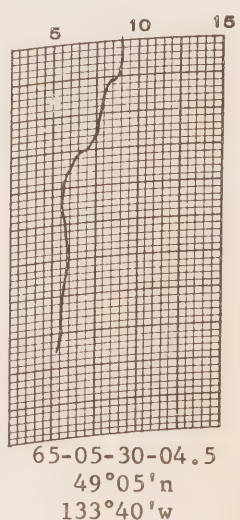
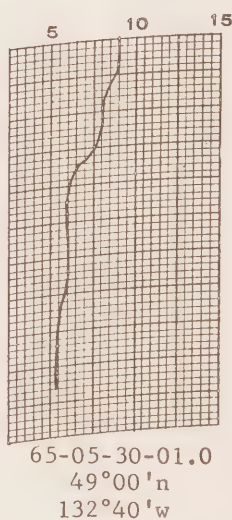
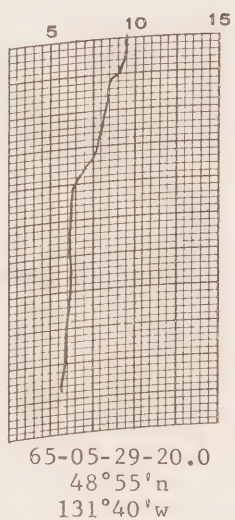
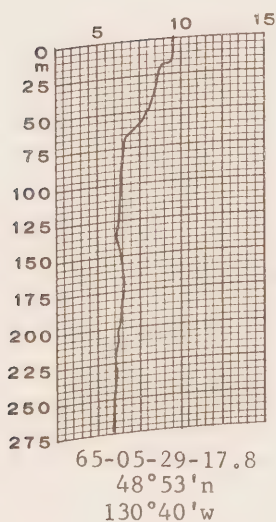
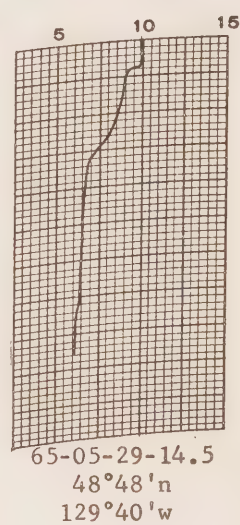
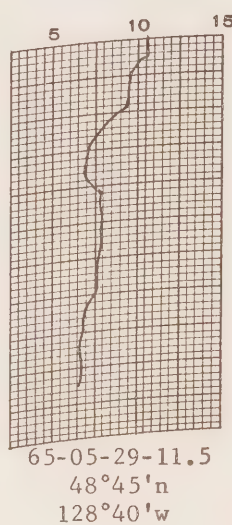
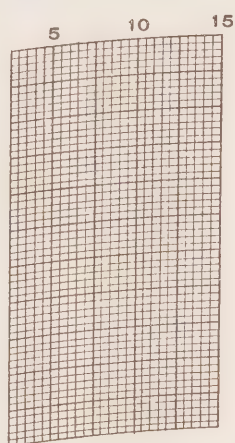
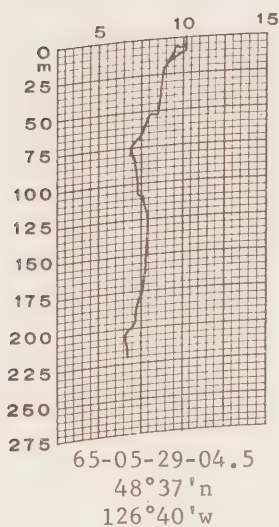
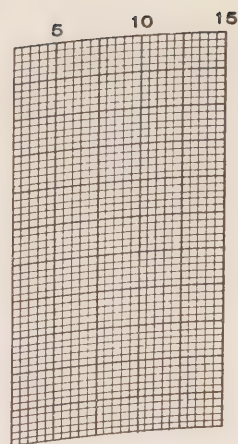
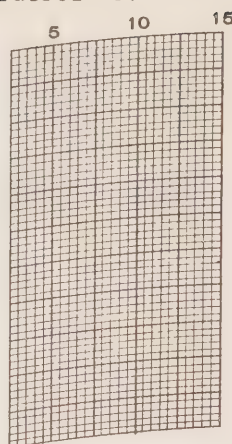
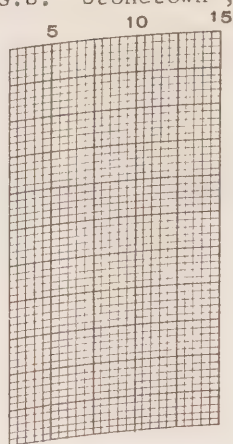
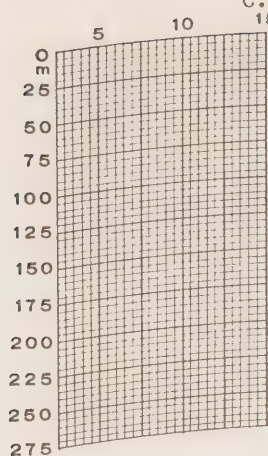
65-06-03-01.8
48°33'n
125°33'w



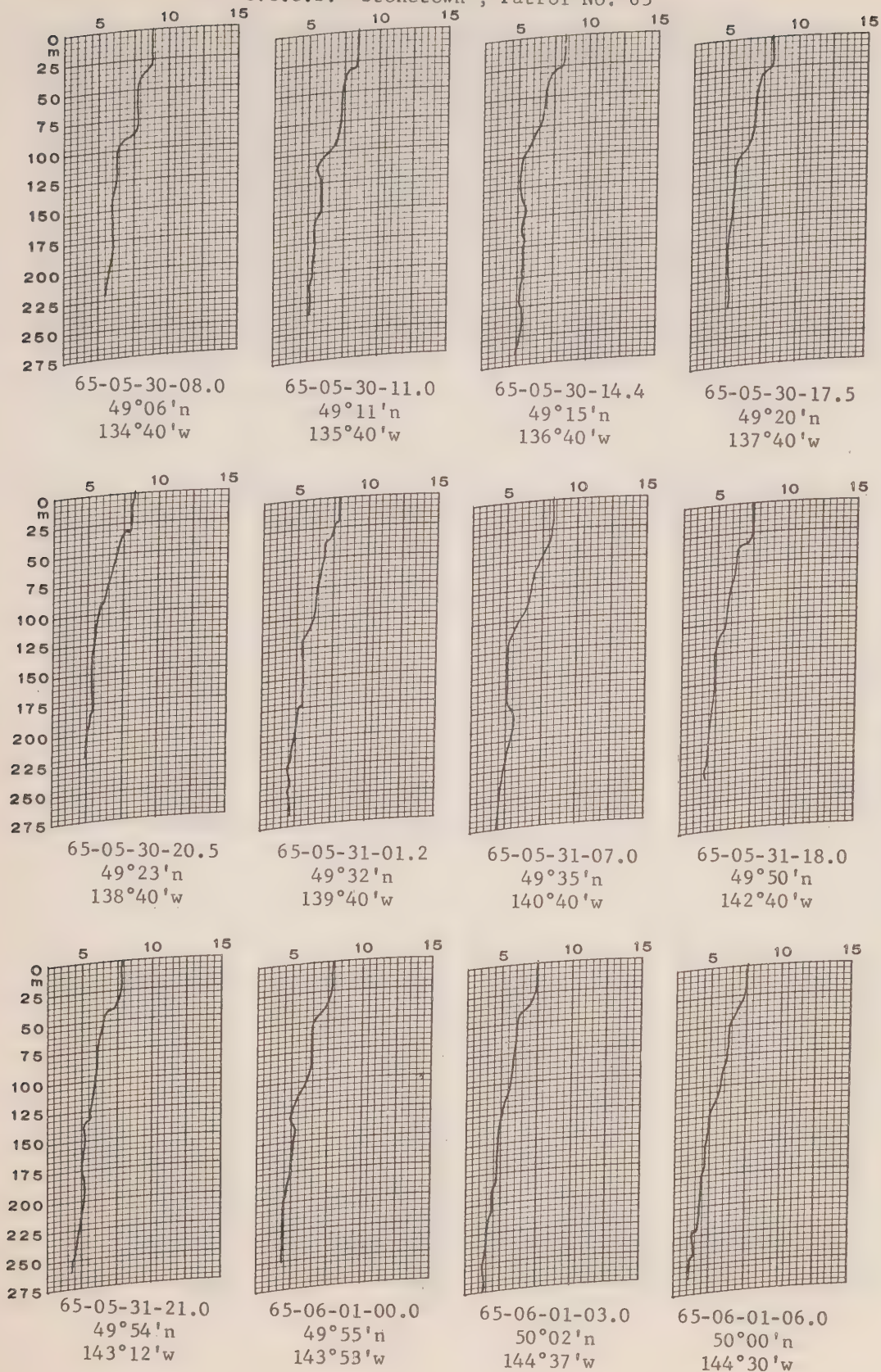
CCGS "STONETOWN" Patrol No. 65

Daily Bathythermograms
and
OCEAN series bathythermograms

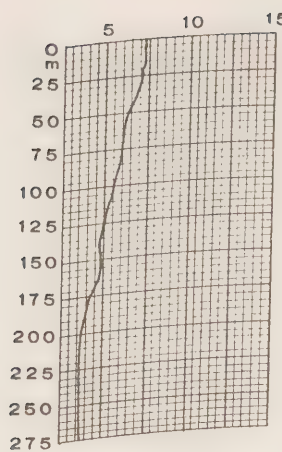
C.C.G.S. "Stonetown", Patrol No. 65



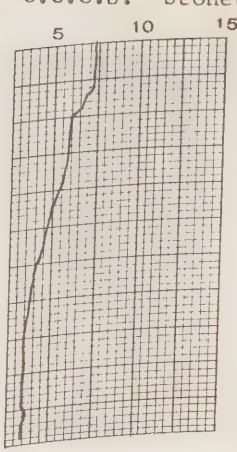
C.C.G.S. "Stonetown", Patrol No. 65



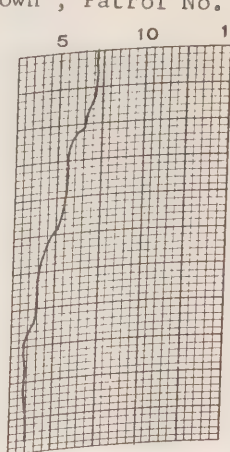
C.C.G.S. "Stonetown", Patrol No. 65



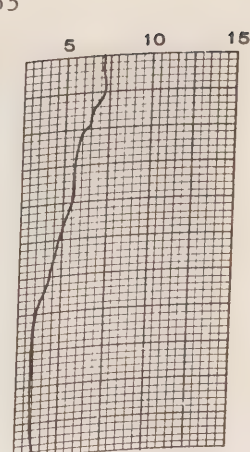
65-06-01-09.0
50°00'N
144°45'W



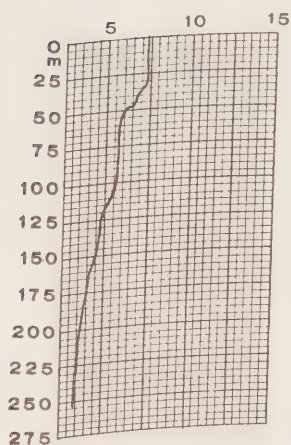
65-06-01-12.0
50°05'N
144°55'W



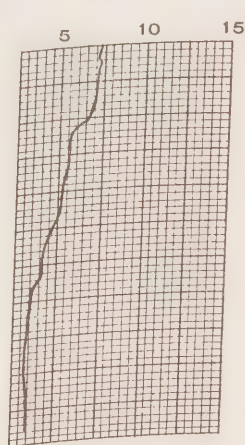
65-06-01-15.0
50°02'N
145°08'W



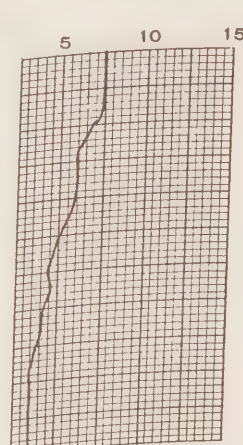
65-06-01-18.0
50°07'N
145°20'W



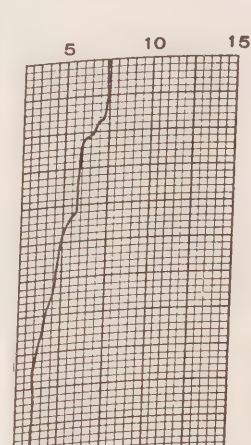
65-06-01-21.0
50°05'N
145°18'W



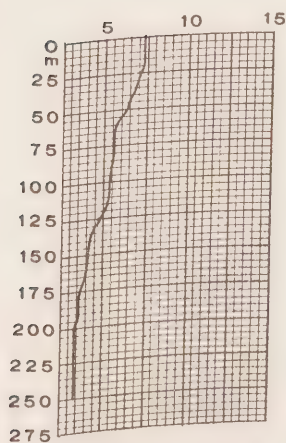
65-06-02-00.0
50°10'N
145°09'W



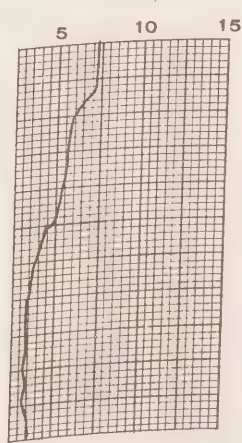
65-06-02-00.0
50°03'N
145°00'W



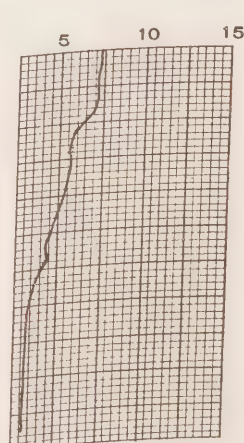
65-06-02-06.0
50°05'N
145°00'W



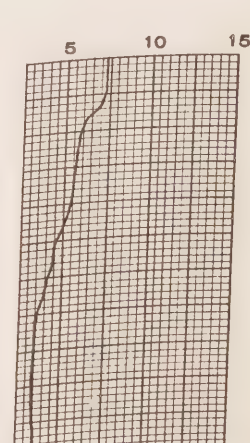
65-06-02-09.0
50°04'N
145°10'W



65-06-02-12.0
50°02'N
145°05'W

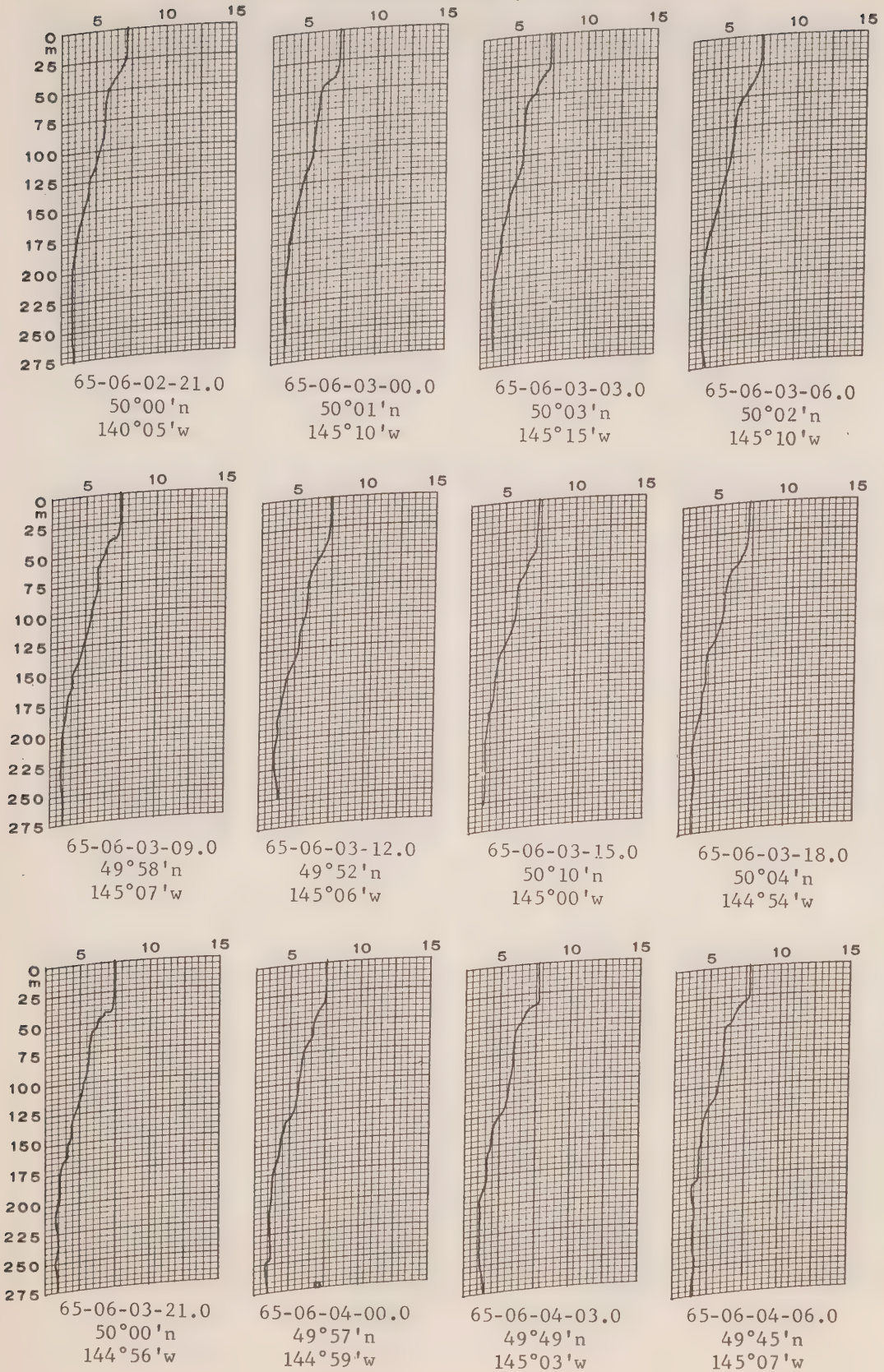


65-06-02-15.0
50°02'N
145°03'W

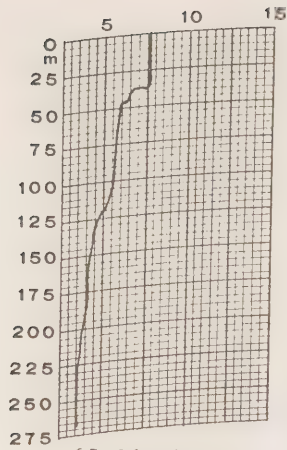


65-06-02-18.0
50°02'N
145°07'W

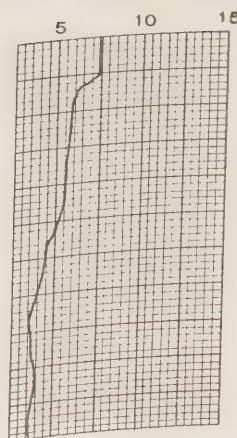
C.C.G.S. "Stonetown", Patrol No. 65



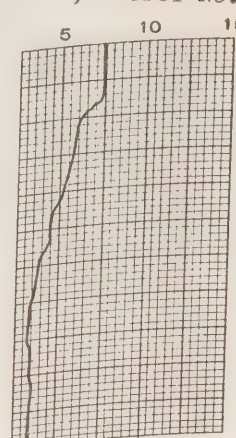
C.C.S.G. "Stonetown", Patrol No. 65



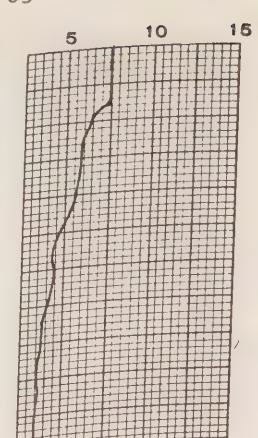
65-06-04-09.0
49°50'N
144°59'W



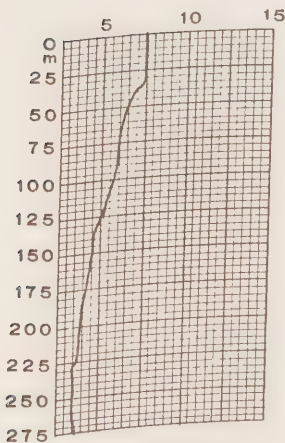
65-06-04-12.0
49°57'N
145°03'W



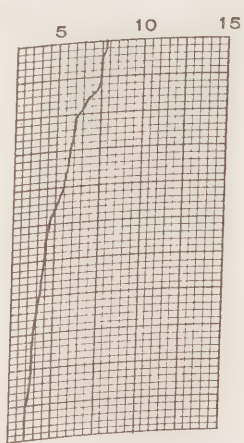
65-06-04-15.0
49°55'N
145°02'W



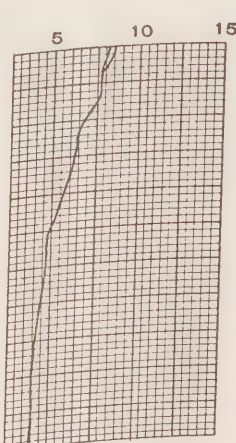
65-06-04-18.0
50°00'N
145°00'W



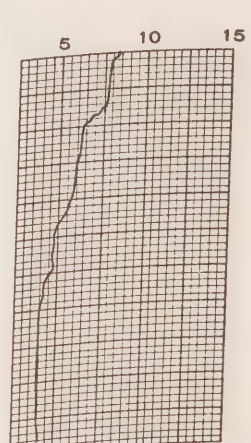
65-06-04-21.0
50°10'N
144°53'W



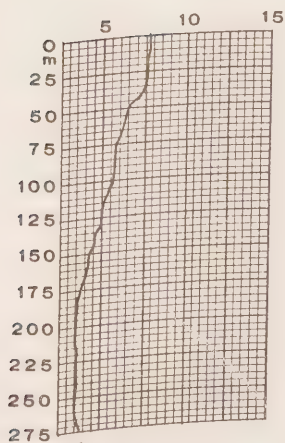
65-06-05-00.0
50°06'N
144°52'W



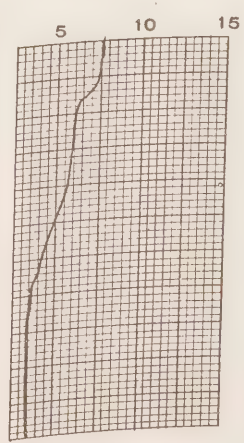
65-06-05-03.0
50°10'N
144°47'W



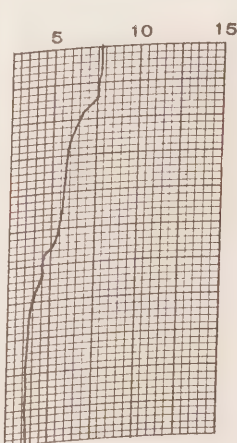
65-06-05-06.0
50°05'N
144°55'W



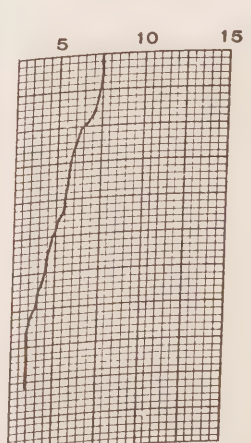
65-06-05-09.0
50°02'N
144°48'W



65-06-05-12.0
50°02'N
145°01'W

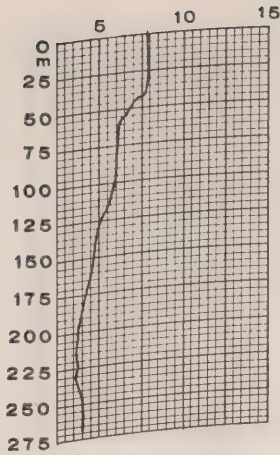


65-06-05-15.0
50°05'N
145°02'W

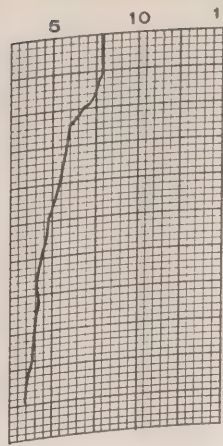


65-06-05-18.0
50°06'N
145°01'W

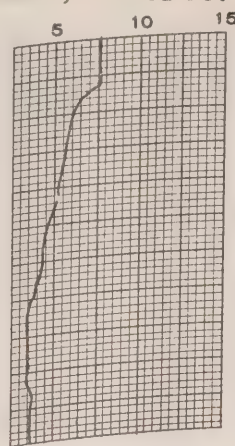
C.C.G.S. "Stonetown", Patrol No. 65



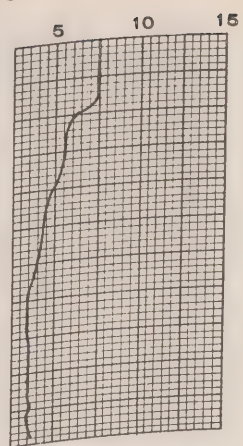
65-06-05-21.0
 $50^{\circ}07'N$
 $144^{\circ}52'W$



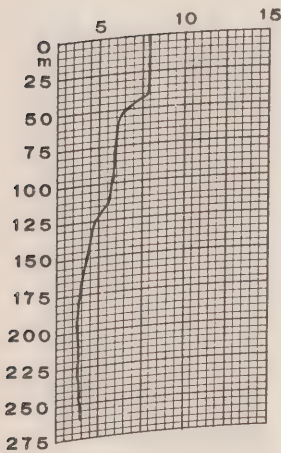
65-06-06-00.0
 $49^{\circ}57'N$
 $144^{\circ}55'W$



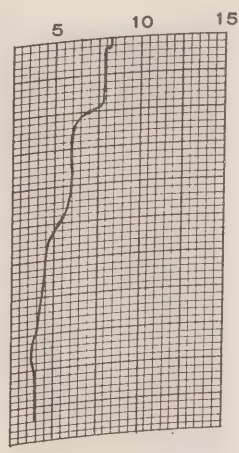
65-06-06-03.0
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 $144^{\circ}59'W$



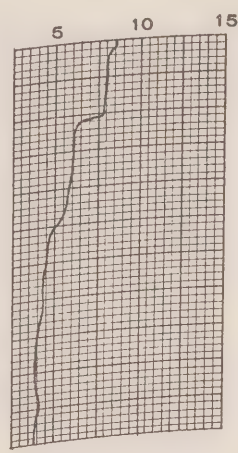
65-06-07-18.0
 $50^{\circ}03'N$
 $144^{\circ}55'W$



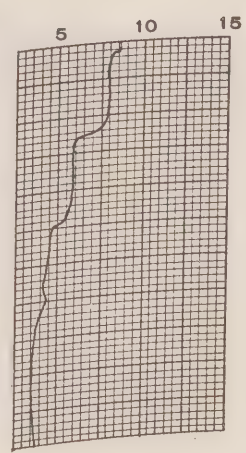
65-06-07-21.0
 $50^{\circ}01'N$
 $145^{\circ}01'W$



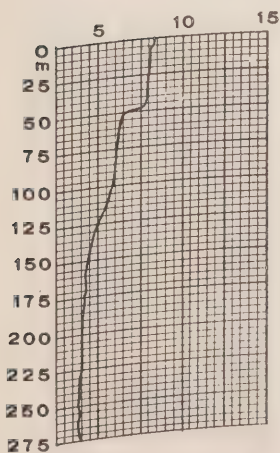
65-06-08-00.0
 $49^{\circ}50'N$
 $145^{\circ}02'W$



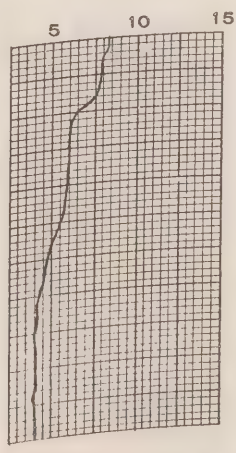
65-06-08-03.0
 $49^{\circ}53'N$
 $145^{\circ}00'W$



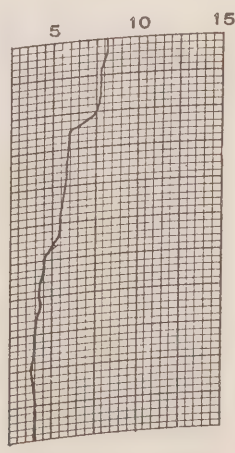
65-06-08-06.0
 $49^{\circ}53'N$
 $144^{\circ}58'W$



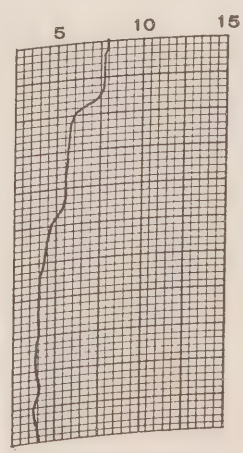
65-06-08-09.0
 $49^{\circ}54'N$
 $144^{\circ}52'W$



65-06-08-12.0
 $49^{\circ}57'N$
 $144^{\circ}51'W$

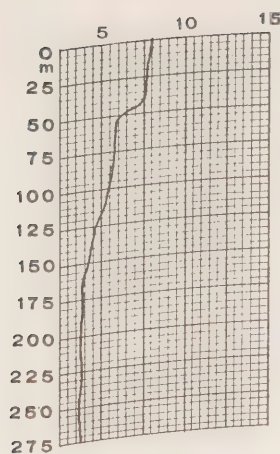


65-06-08-15.0
 $50^{\circ}00'N$
 $144^{\circ}50'W$

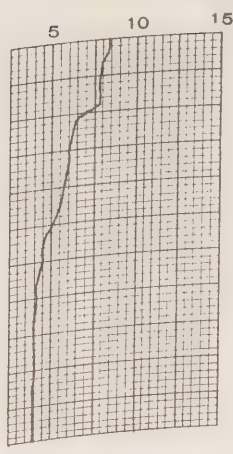


65-06-08-18.0
 $49^{\circ}57'N$
 $144^{\circ}49'W$

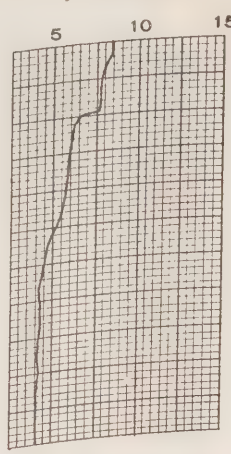
C.C.G.S. "Stonetown", Patrol No. 65



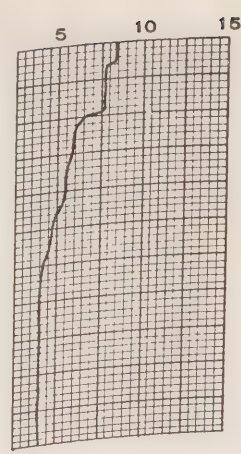
65-06-08-21.0
49°57'N
144°48'W



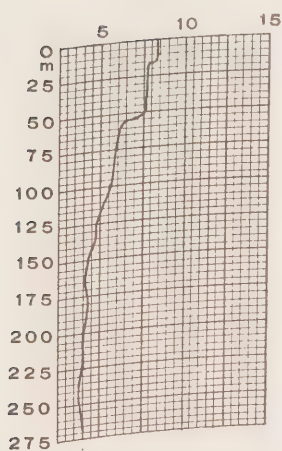
56-06-09-00.0
49°58'N
144°45'W



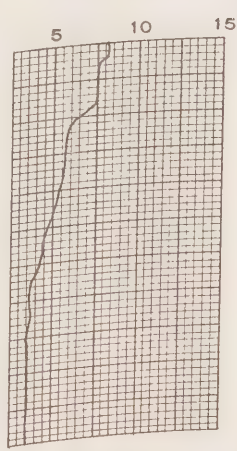
65-06-09-03.0
50°04'N
144°43'W



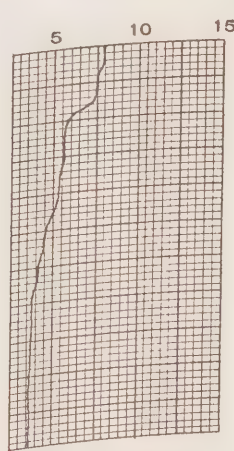
65-06-09-06.0
50°06'N
144°40'W



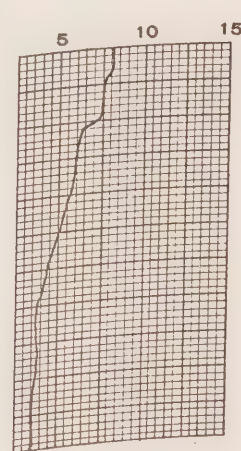
65-06-09-09.0
50°05'N
144°40'W



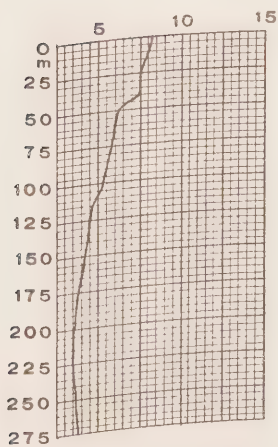
65-06-09-12.0
50°02'N
144°52'W



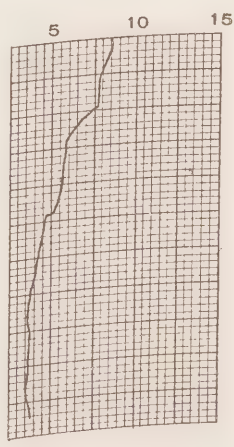
65-06-09-15.0
50°00'N
144°50'W



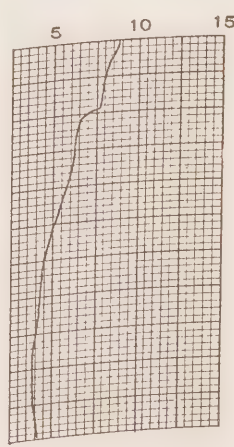
65-06-09-18.0
50°08'N
144°46'W



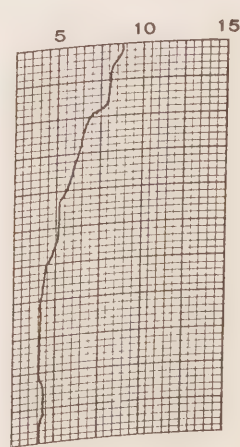
65-06-09-21.0
50°09'N
144°43'W



65-06-10-00.0
50°10'N
144°40'W

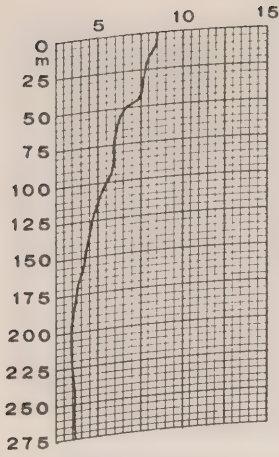


65-06-10-03.0
50°10'N
144°50'W

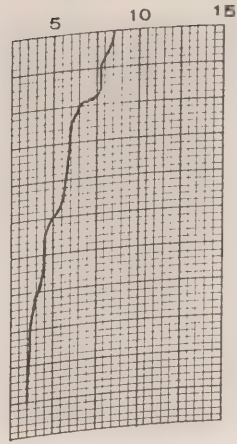


65-06-10-06.0
50°12'N
144°50'W

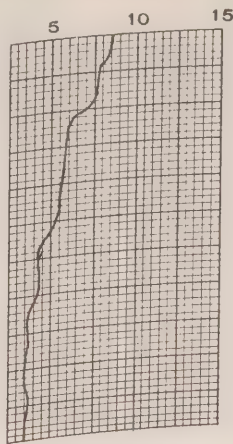
C.C.G.S. "Stonetown", Patrol No. 65



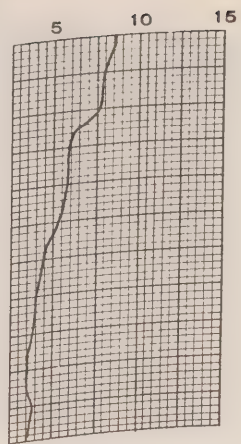
65-06-10-09.0
50°15'n
144°49'w



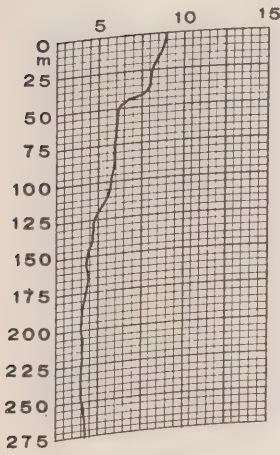
65-06-10-12.0
50°00'n
145°01'w



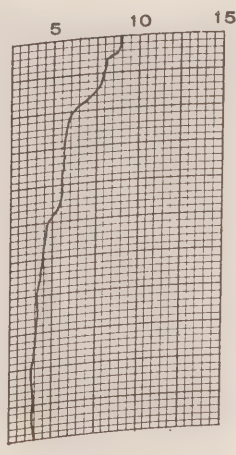
65-06-10-15.0
50°05'n
145°00'w



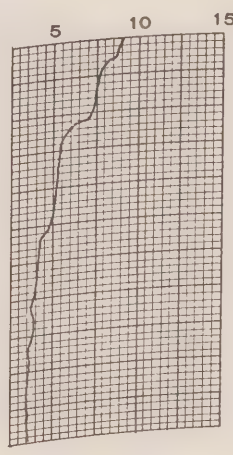
65-06-10-18.0
50°02'n
144°52'w



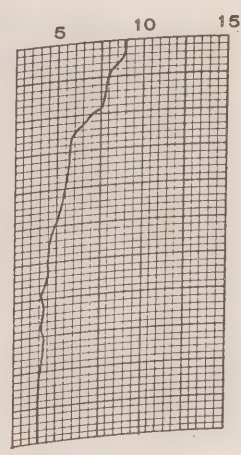
65-06-10-21.0
50°02'n
144°49'w



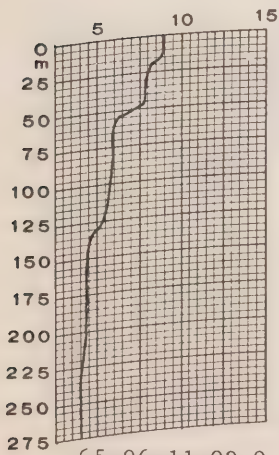
65-06-11-00.0
49°58'n
144°47'w



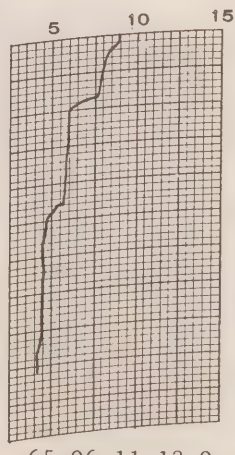
65-06-11-03.0
49°58'n
144°42'w



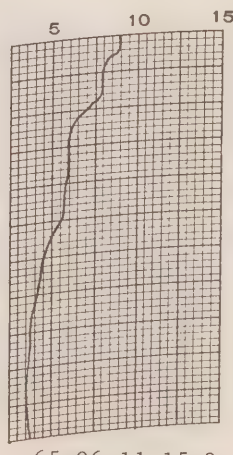
65-06-11-06.0
49°57'n
144°42'w



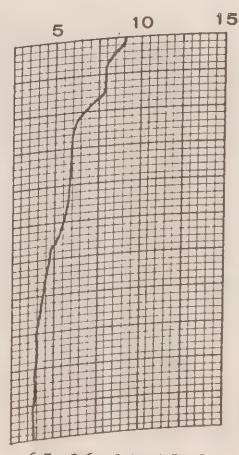
65-06-11-09.0
49°57'n
144°40'w



65-06-11-12.0
49°58'n
144°45'w

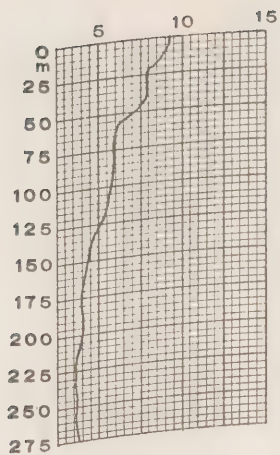


65-06-11-15.0
50°00'n
144°52'w

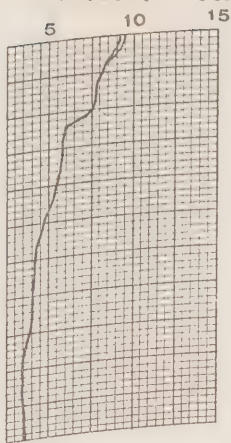


65-06-11-18.0
49°59'n
144°53'w

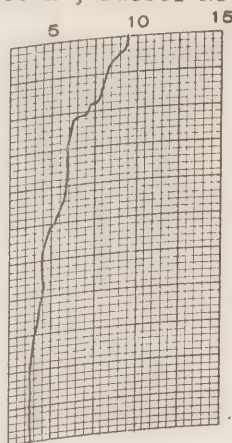
C.C.G.S. "Stonetown", Patrol No. 65



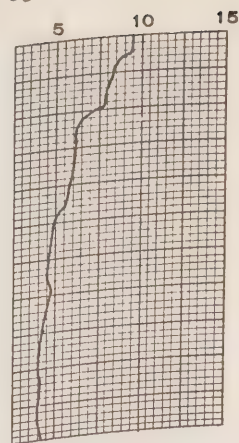
65-06-11-21.0
49°59'n
144°52'w



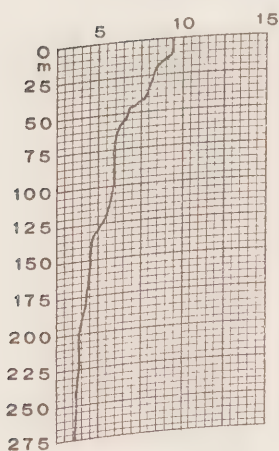
65-06-12-00.0
49°57'n
144°55'w



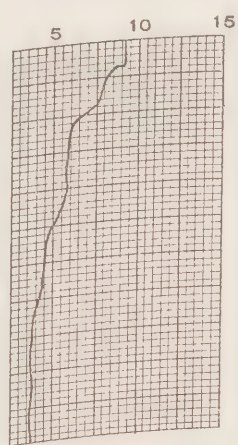
65-06-12-03.0
49°58'n
144°55'w



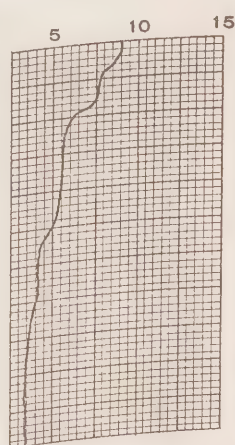
65-06-12-06.0
49°53'n
144°46'w



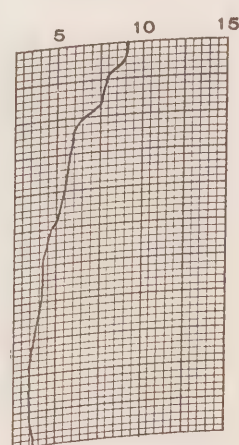
65-06-12-09.0
49°52'n
144°45'w



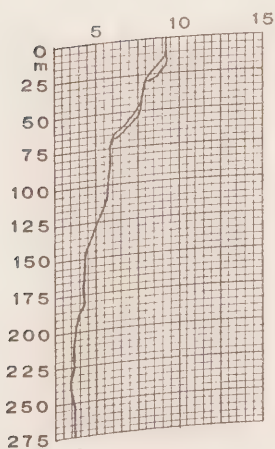
65-06-12-12.0
49°55'n
144°45'w



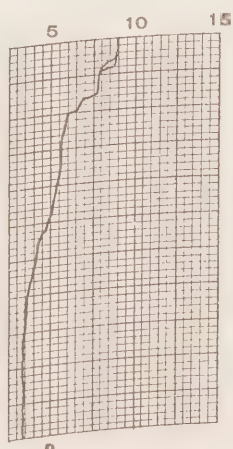
65-06-12-15.0
49°52'n
144°48'w



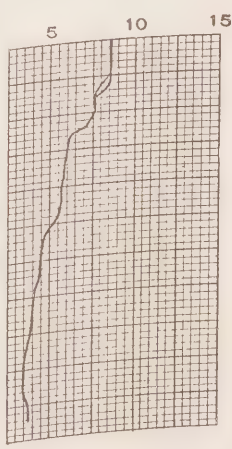
65-06-12-18.0
49°53'n
144°50'w



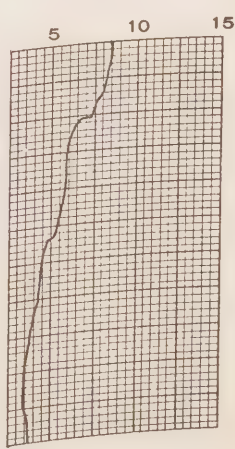
65-06-12-21.0
49°54'n
144°51'w



65-06-13-00.0
49°58'n
144°59'w

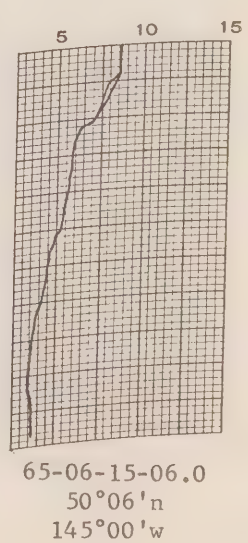
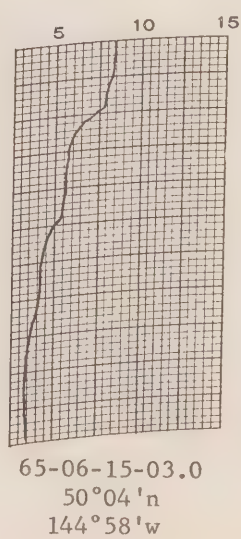
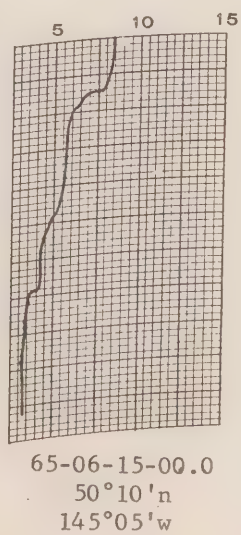
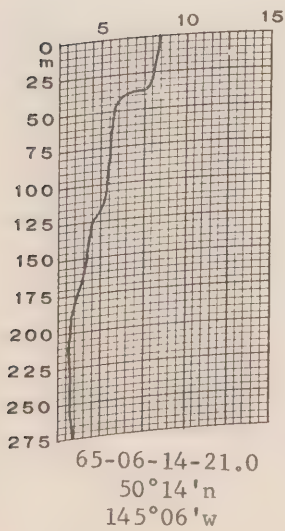
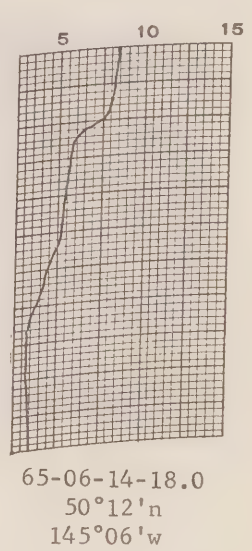
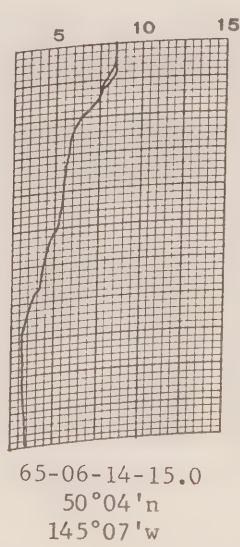
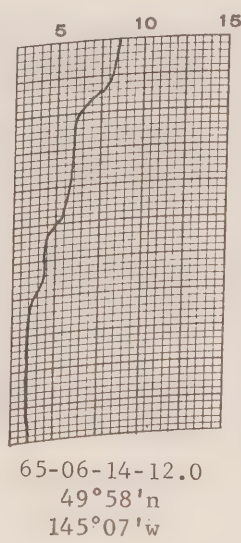
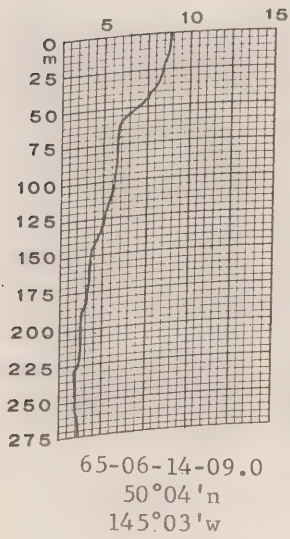
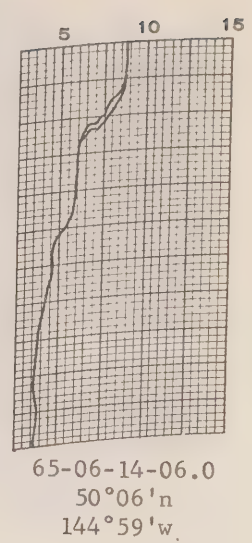
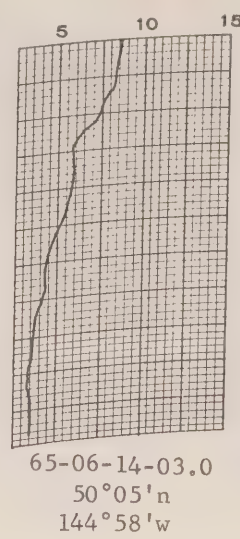
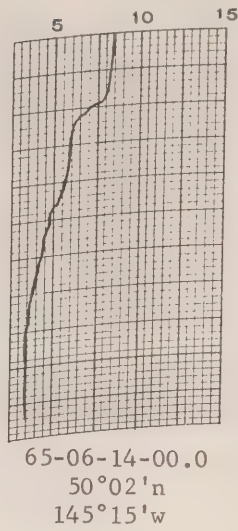
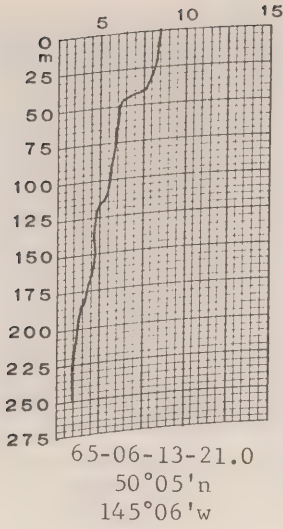


65-06-13-03.0
49°02'n
145°03'w

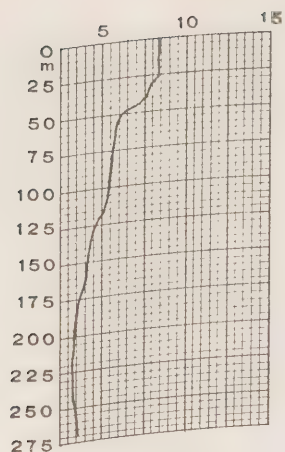


65-06-13-18.0
50°04'n
145°05'w

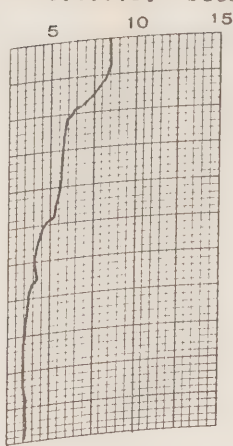
C.C.G.S. "Stonetown", Patrol No. 65



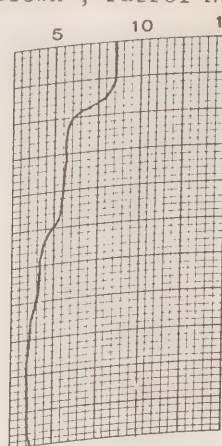
C.C.G.S. "Stonetown", Patrol No. 65



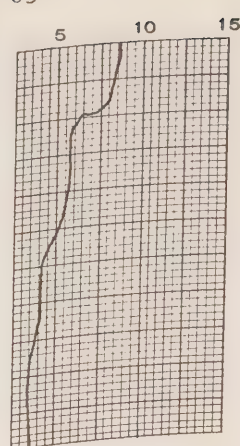
65-06-15-09.0
50°10'N
144°58'W



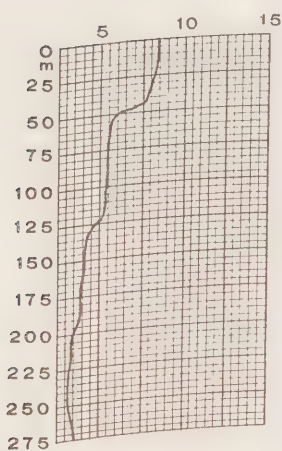
65-06-15-12.0
50°02'N
144°56'W



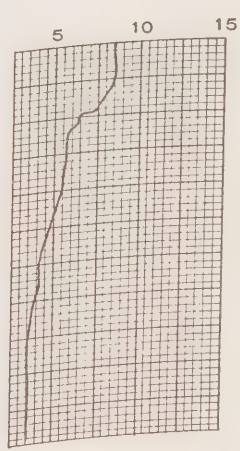
65-06-15-15.0
49°55'N
144°55'W



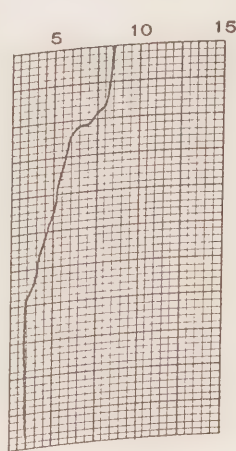
65-06-15-18.0
50°00'N
144°47'W



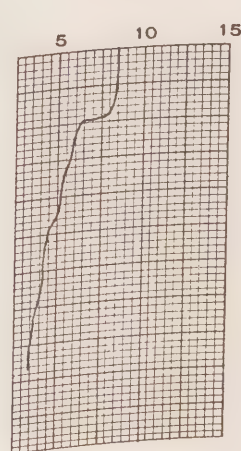
65-06-15-21.0
50°00'N
144°50'W



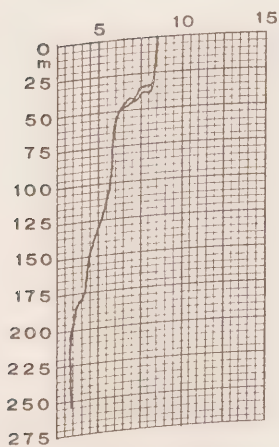
65-06-16-00.0
50°01'N
144°53'W



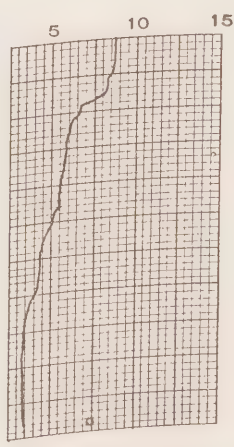
65-06-17-18.0
49°57'N
145°25'W



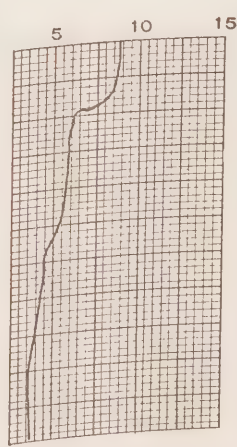
65-06-17-21.0
50°05'N
145°12'W



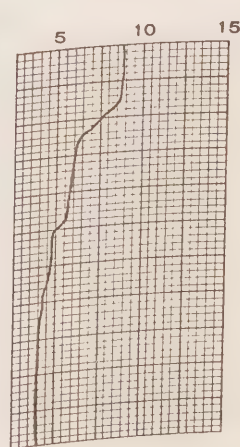
65-06-18-00.0
50°12'N
144°56'W



65-06-18-03.0
50°15'N
144°56'W

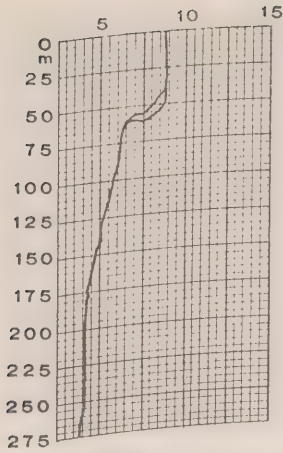


65-06-18-06.0
50°10'N
145°00'W

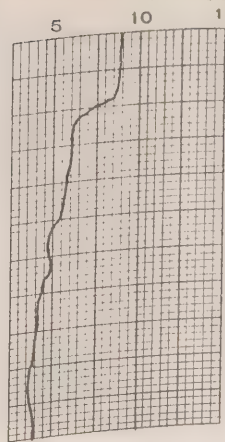


65-06-18-09.0
50°00'N
145°04'W

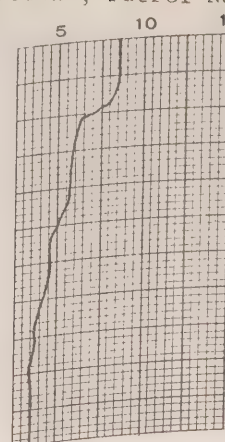
C.C.G.S. "Stonetown", Patrol No. 65



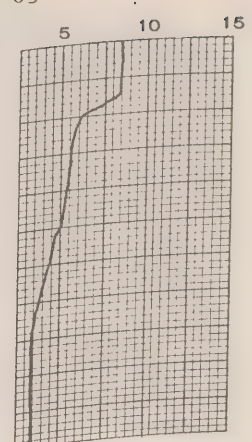
65-06-18-12.0
49°59'N
145°07'W



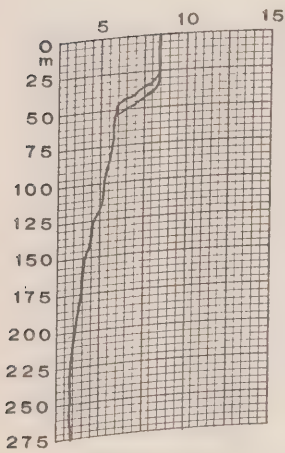
65-06-18-15.0
50°05'N
145°05'W



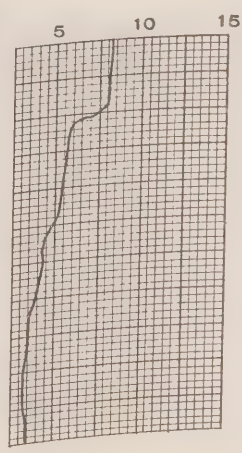
65-06-18-18.0
50°03'N
145°02'W



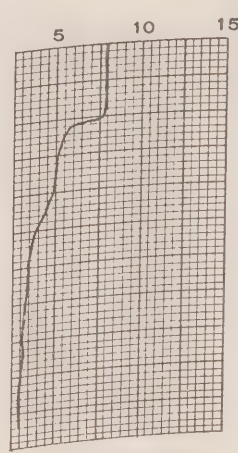
65-06-18-21.0
50°10'N
145°03'W



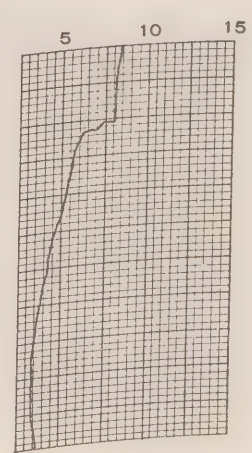
65-06-19-00.0
50°06'N
145°04'W



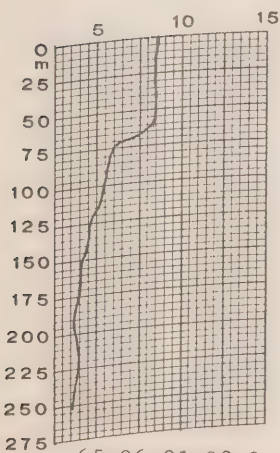
65-06-20-18.0
50°04'N
145°00'W



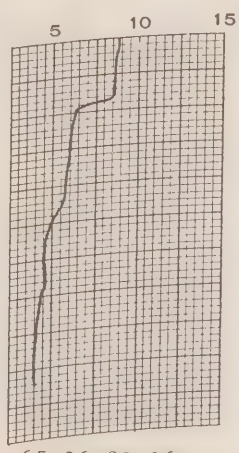
65-06-20-21.0
50°03'N
145°10'W



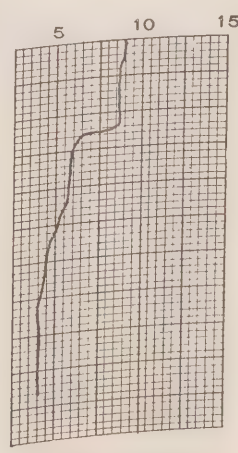
65-06-21-00.0
50°11'N
145°13'W



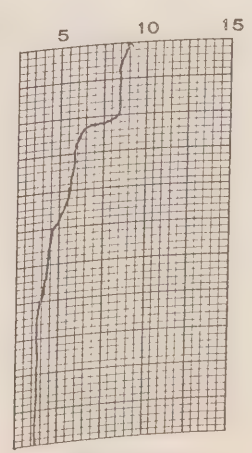
65-06-21-03.0
50°06'N
145°12'W



65-06-21-06.0
50°03'N
144°53'W

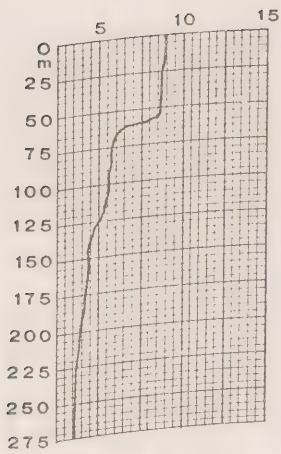


65-06-21-09.0
49°54'N
144°43'W

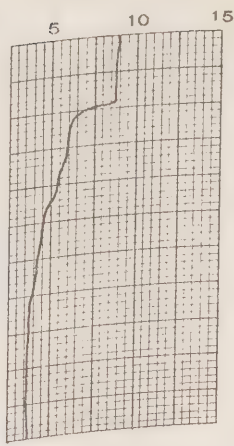


65-06-21-12.0
50°00'N
144°52'W

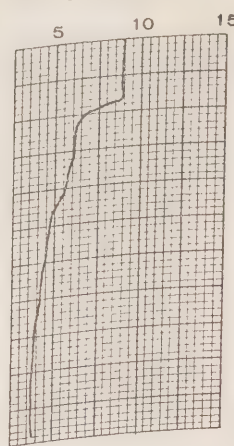
C.C.G.S. "Stonetown", Patrol No. 65



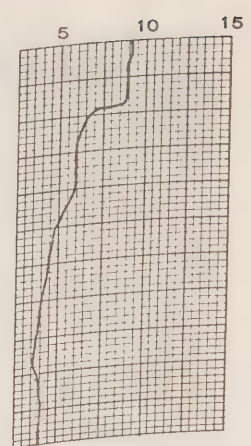
65-06-21-15.0
 $49^{\circ}57'N$
 $144^{\circ}50'W$



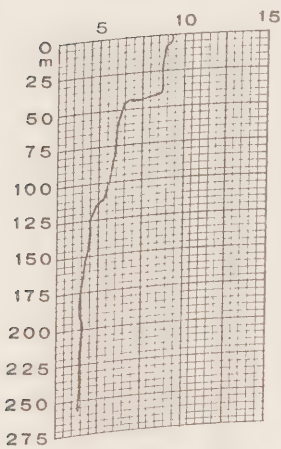
65-06-21-18.0
 $50^{\circ}01'N$
 $144^{\circ}46'W$



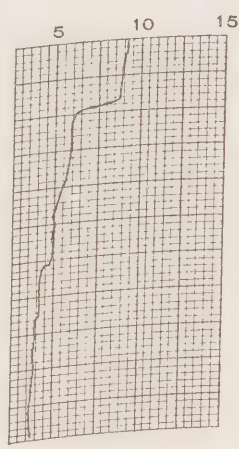
65-06-21-21.0
 $50^{\circ}00'N$
 $144^{\circ}46'W$



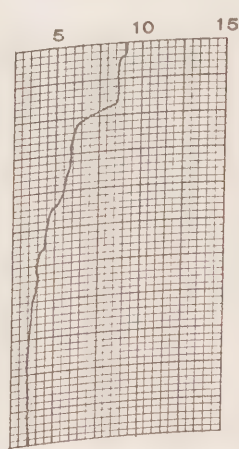
65-06-22-00.0
 $49^{\circ}58'N$
 $144^{\circ}46'W$



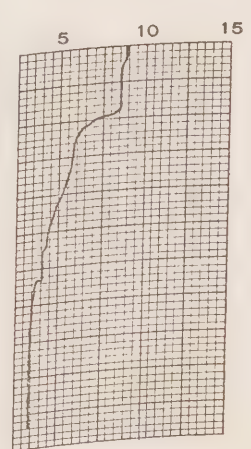
65-06-22-03.0
 $49^{\circ}55'N$
 $144^{\circ}42'W$



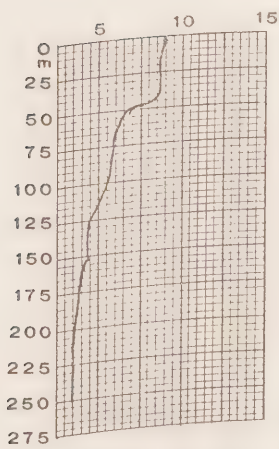
65-06-22-06.0
 $49^{\circ}54'N$
 $144^{\circ}43'W$



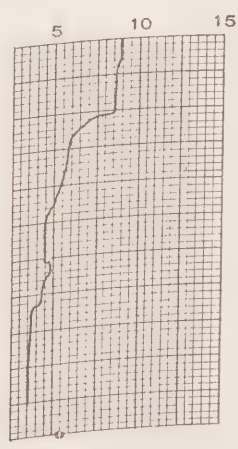
65-06-22-09.0
 $49^{\circ}59'N$
 $144^{\circ}43'W$



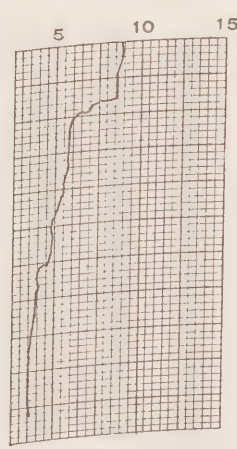
65-06-22-12.0
 $49^{\circ}55'N$
 $144^{\circ}45'W$



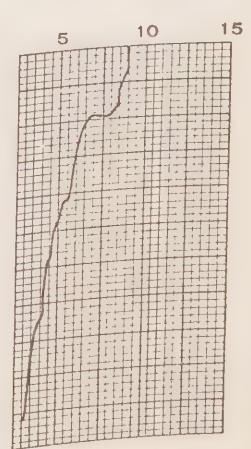
65-06-22-15.0
 $49^{\circ}53'N$
 $144^{\circ}42'W$



65-06-22-18.0
 $49^{\circ}50'N$
 $144^{\circ}47'W$

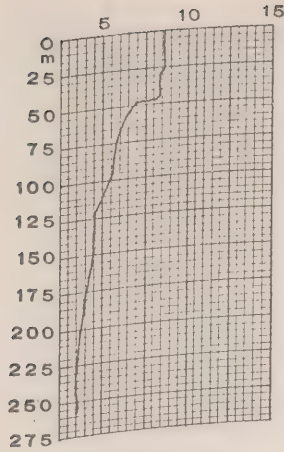


65-06-22-21.0
 $49^{\circ}49'N$
 $144^{\circ}34'W$

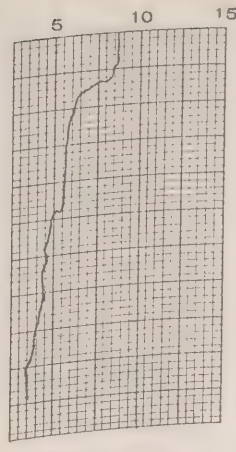


65-06-23-00.0
 $49^{\circ}47'N$
 $144^{\circ}40'W$

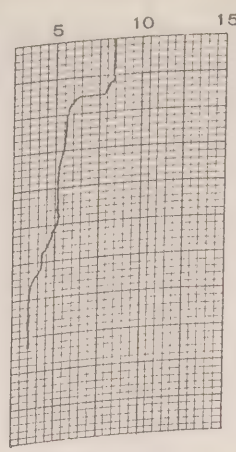
C.C.G.S. "Stonetown", Patrol No. 65



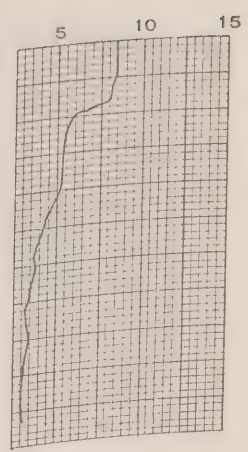
65-06-23-03.0
49°47'N
144°55'W



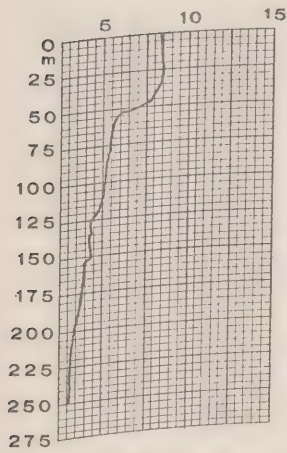
65-06-23-06.0
49°47'N
145°03'W



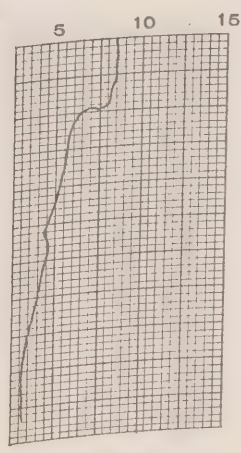
65-06-23-09.0
49°55'N
145°08'W



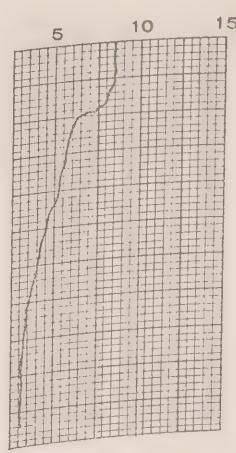
65-06-23-12.0
49°57'N
145°07'W



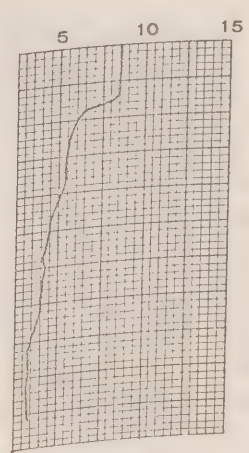
65-06-23-15.0
49°55'N
145°02'W



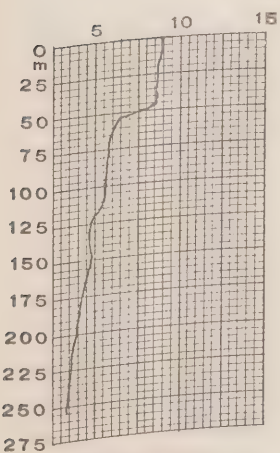
65-06-23-18.0
49°56'N
144°57'W



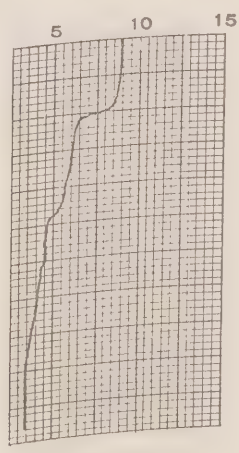
65-06-23-21.0
49°55'N
144°52'W



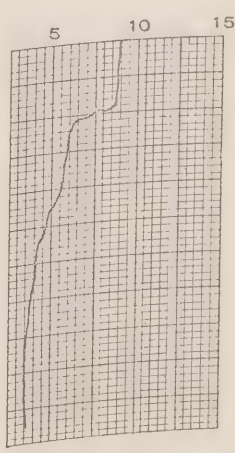
65-06-24-00.0
49°55'N
145°00'W



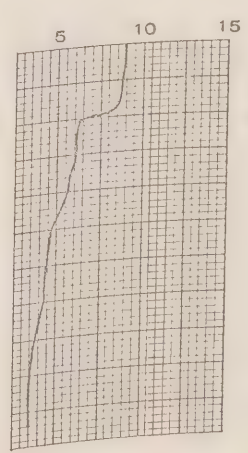
65-06-24-03.0
49°55'N
145°00'W



65-06-24-06.0
49°56'N
144°51'W

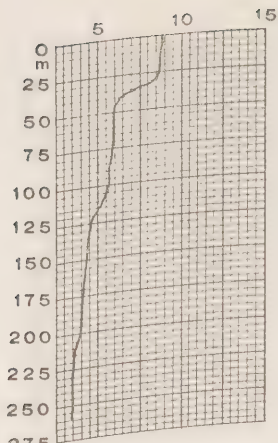


65-06-24-09.0
49°58'N
144°49'W

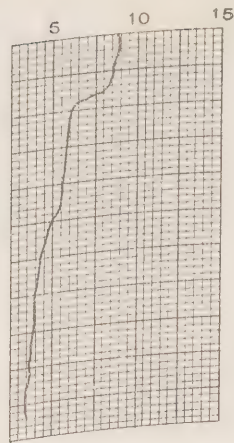


65-06-24-12.0
49°55'N
144°45'W

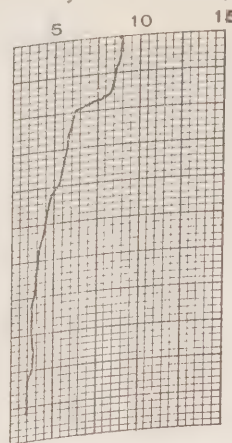
C.C.G.S. "Stonetown", Patrol No. 65



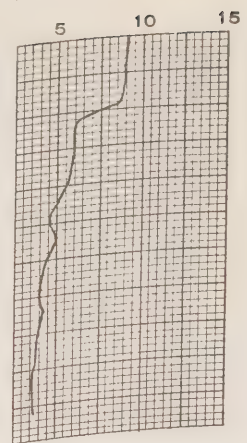
65-06-24-15.0
49°54'n
144°44'w



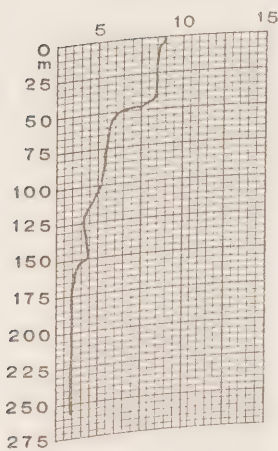
65-06-24-18.0
49°56'n
144°45'w



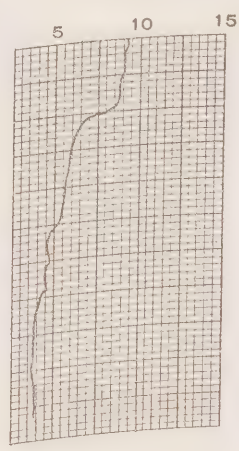
65-06-24-21.0
50°02'n
144°43'w



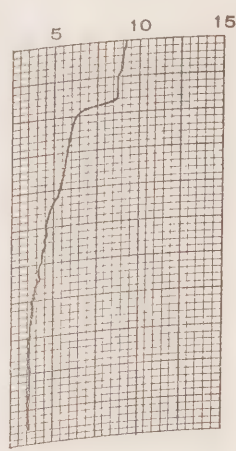
65-06-25-00.0
49°58'n
144°38'w



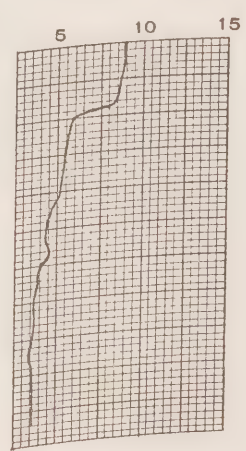
65-06-25-03.0
49°57'n
144°37'w



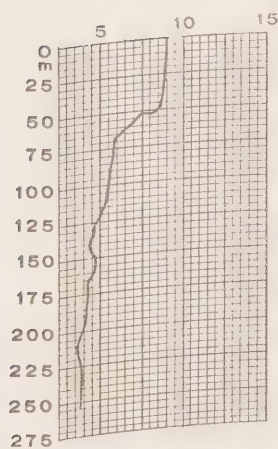
65-06-25-06.0
49°51'n
144°38'w



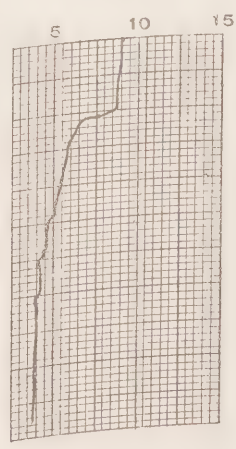
65-06-25-09.0
49°52'n
144°34'w



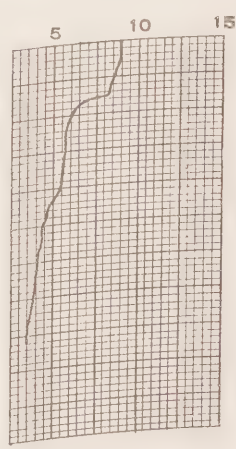
65-06-25-12.0
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144°30'w



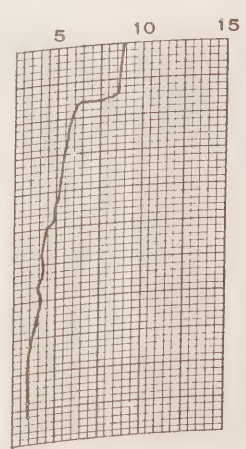
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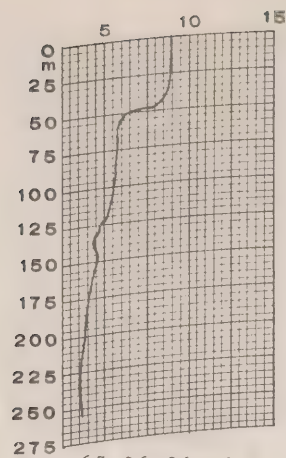


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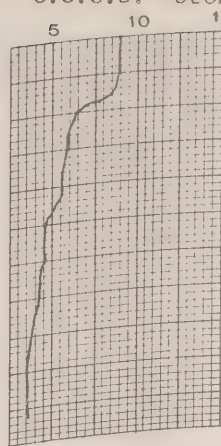


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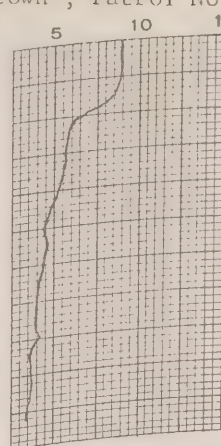
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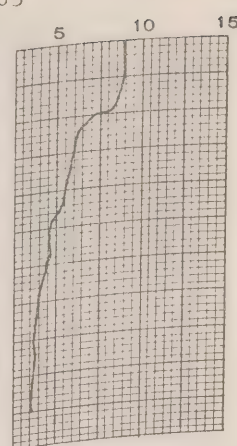
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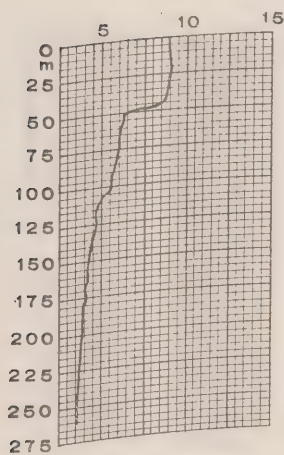
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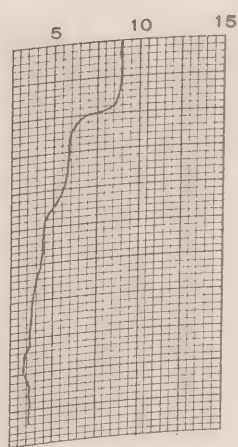
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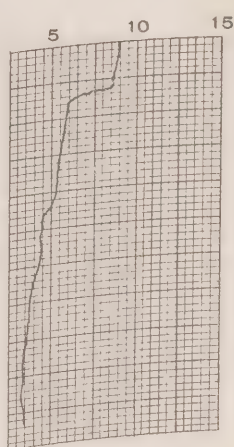
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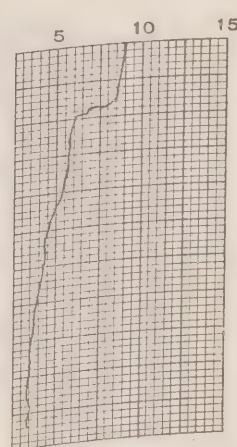
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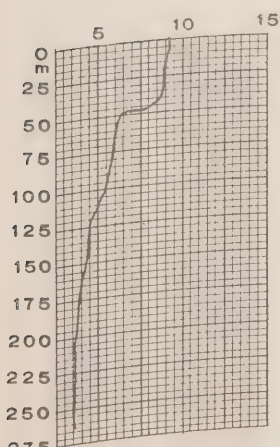
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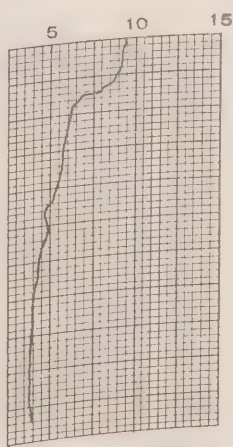
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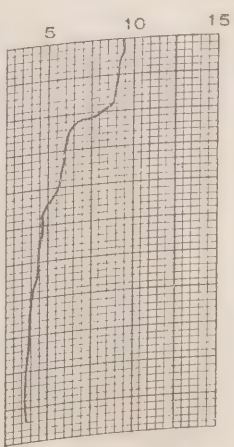
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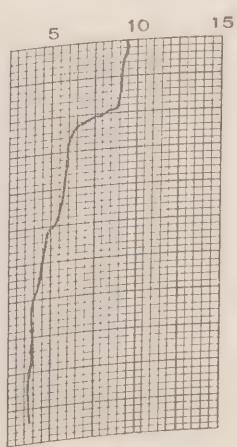
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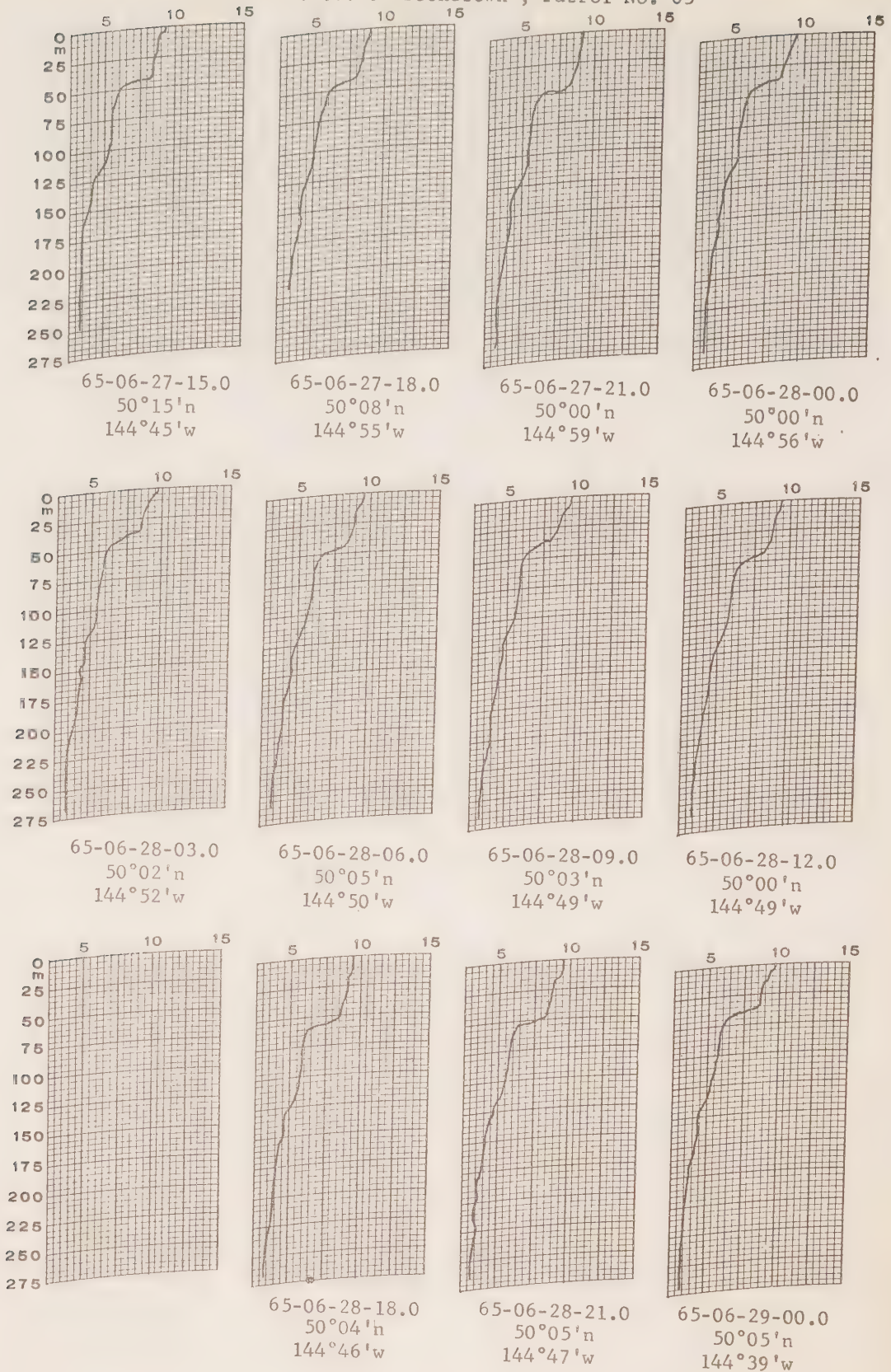


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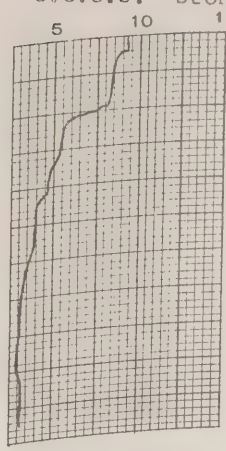
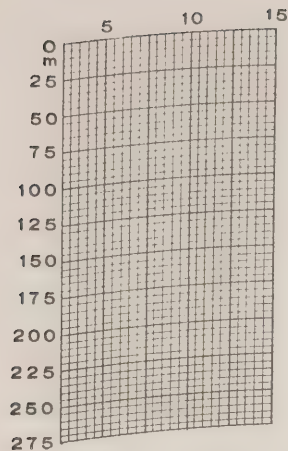


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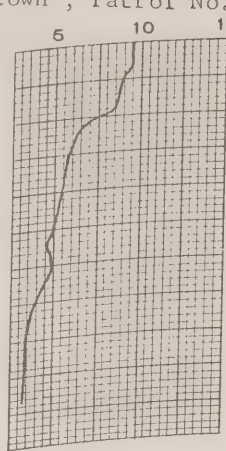
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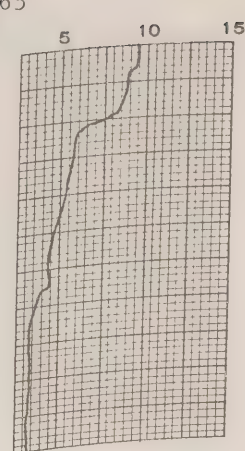
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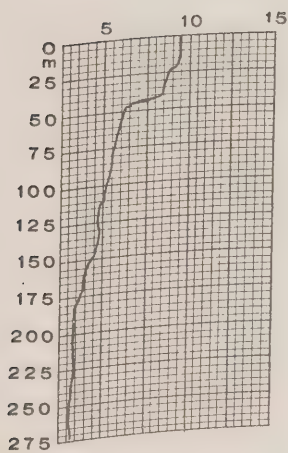
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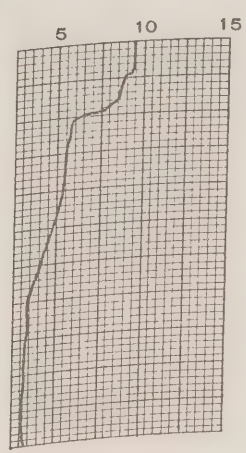
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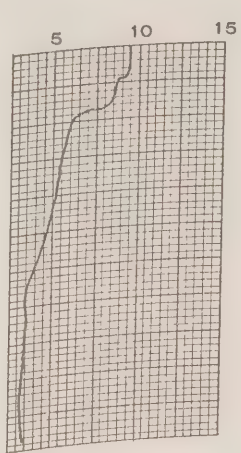
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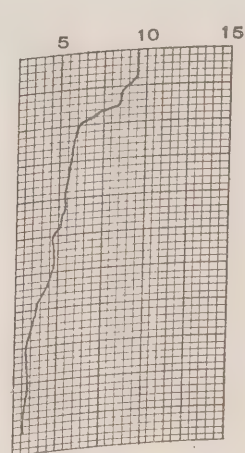
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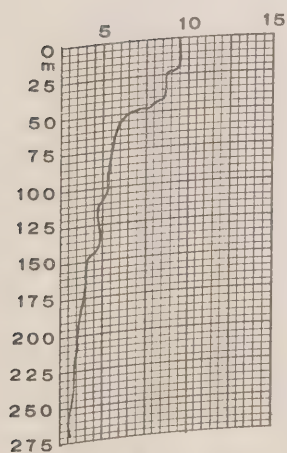
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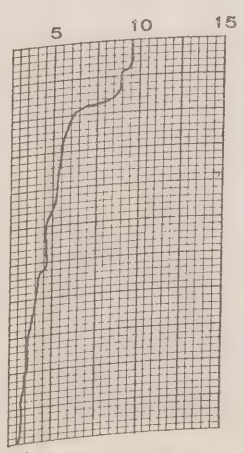
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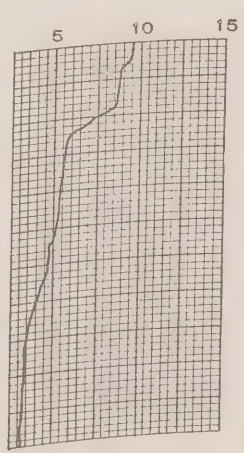
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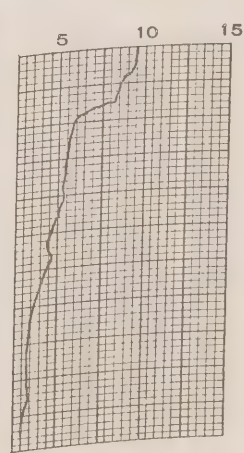
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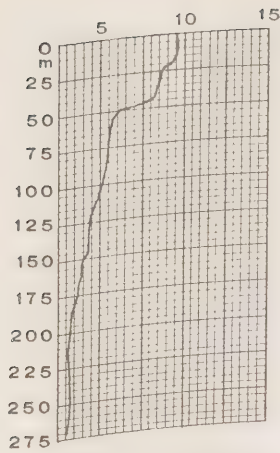


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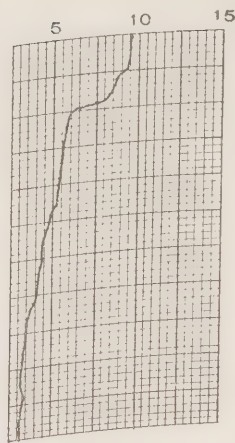


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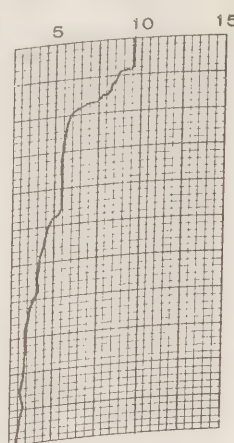
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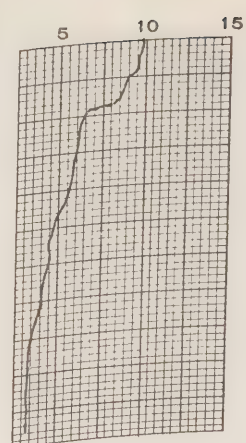
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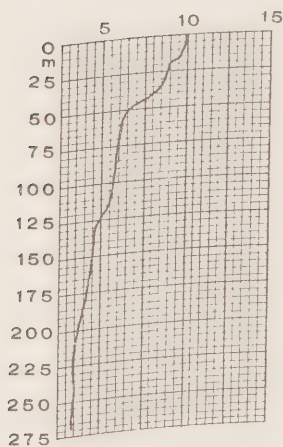
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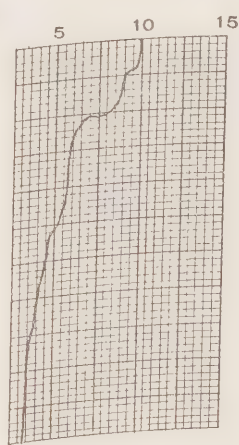
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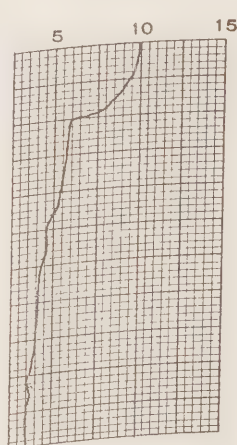
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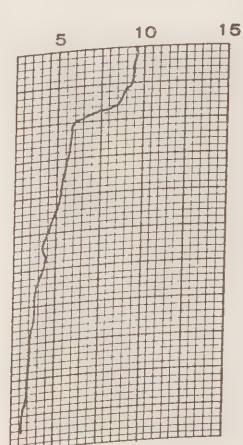
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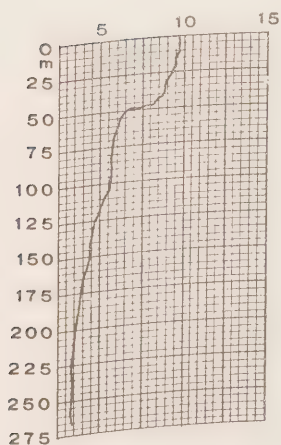
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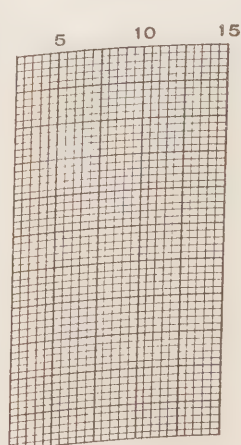
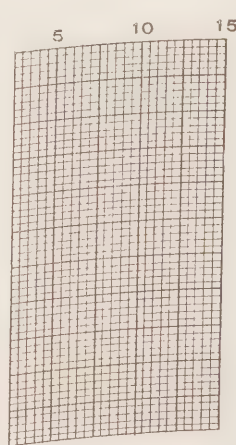
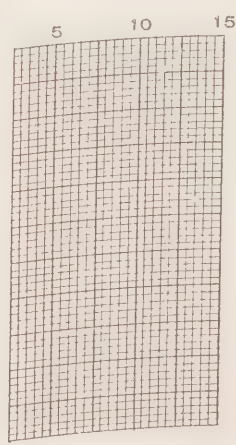
65-07-01-09.0
50°08'N
144°47'W



65-07-01-00.0
50°11'N
144°44'W



65-07-01-15.0
50°12'N
144°45'W



SECTION V

Surface Salinity Data

Surface Salinity Observations

Date-Time	Position		Salinity
GMT	Latitude	Longitude	‰
CCGS "St. Catharines", Survey P-65-2			
65-04 - 17-10.5	48°46'n	127°40'w	31.787
17-16.0	48°51'	129°40'	32.050
17-23.3	49°04'	131°40'	32.087
18-06.2	49°15'	133°40'	32.558
18-12.8	49°22'	135°40'	32.635
18-21.1	49°30'	137°40'	32.604
19-03.8	49°39'	139°40'	32.693
19-11.5	49°45'	141°40'	32.723
19-20.8	49°54'	143°40'	32.724
21-00.0	49°57'	144°53'	32.704
22-00.0	50°00'	145°00'	32.778
23-00.0	50°02'	144°53'	32.724
24-00.0	50°00'	144°58'	32.760
25-00.0	50°07'	145°04'	32.718
26-00.0	49°56'	144°58'	32.681
27-00.0	49°53'	145°10'	32.715
28-00.0	50°01'	145°20'	32.718
29-00.0	50°06'	145°05'	32.578
30-00.0	50°01'	144°52'	32.720
65-05 - 01-00.0	50°01'	144°57'	32.723
02-00.0	50°06'	144°47'	32.737
03-01.0	49°45'	145°12'	32.700
04-00.0	49°56'	145°28'	32.713
05-00.0	50°02'	145°21'	32.840
06-00.0	50°02'	144°54'	32.721
07-00.0	50°00'	144°52'	32.717
08-00.0	50°01'	144°52'	32.729
09-00.0	50°02'	144°54'	32.702
10-00.0	49°59'	145°01'	32.694
11-00.0	49°53'	145°04'	32.706
12-00.0	49°57'	145°03'	32.693
13-00.0	49°56'	144°57'	32.706
14-00.0	50°02'	144°56'	32.726
15-00.0	49°58'	144°55'	32.706
15-22.0	50°03'	145°20'	32.700
17-00.0	49°54'	144°56'	32.684
18-00.0	50°02'	144°58'	32.690
19-00.0	50°00'	145°04'	32.739
20-00.0	49°58'	144°57'	32.710
21-00.0	50°01'	145°00'	32.778
22-00.0	49°57'	145°00'	32.714

Surface Salinity Observations

Date-Time	Position		Salinity
GMT	Latitude	Longitude	‰
CCGS "St. Catharines", Survey P-65-2			
65-05 - 23-00.0	50°02'n	145°02'w	32.714
24-00.0	50°06'	144°57'	32.685
25-00.0	49°45'	145°02'	32.649
26-00.0	49°44'	145°12'	32.703
27-00.0	50°06'	145°06'	32.660
28-00.0	49°57'	144°57'	32.673
29-00.0	49°58'	144°53'	32.669
30-00.0	50°03'	144°55'	32.669
31-00.0	50°04'	144°45'	32.647
31-05.0	49°54'	143°40'	32.678
31-18.6	49°40'	141°40'	32.668
65-06 - 01-01.4	49°38'	139°40'	32.771
01-08.0	49°30'	137°40'	32.611
01-15.5	49°23'	135°40'	32.554
01-21.9	49°15'	133°40'	32.566
02-04.2	49°05'	131°40'	32.582
02-11.0	48°55'	129°40'	32.375

CCGS "Stonetown", Patrol No. 65

65-06 - 01-00.0	49°55'n	143°53'w	32.732
02-00.0	50°10'	145°09'	32.693
03-00.0	50°01'	145°10'	32.721
04-00.0	49°57'	144°59'	32.679
05-00.0	50°06'	144°52'	32.732
06-00.0	49°57'	144°55'	32.674
08-00.0	49°50'	145°02'	32.673
09-00.0	49°58'	144°45'	32.690
10-00.0	50°10'	144°40'	32.673
11-00.0	49°58'	144°47'	32.718
12-00.0	49°57'	144°55'	32.692
13-00.0	49°58'	144°59'	32.679
14-00.0	50°02'	145°15'	32.679
15-00.0	50°10'	145°05'	32.640
16-00.0	50°01'	144°53'	32.675
18-00.0	50°12'	144°56'	32.691
19-00.0	50°06'	145°04'	32.678
21-00.0	50°11'	145°13'	32.687
22-00.0	49°58'	144°46'	32.707
24-00.0	49°55'	145°00'	32.695

Surface Salinity Observations

Date-Time	Position		Salinity
GMT	Latitude	Longitude	‰
CCGS "Stonetown", Patrol No. 65			
65-06 - 25-00.0	49°58'n	144°38'w	32.686
26-00.0	50°04'	145°01'	32.465
27-00.0	50°10'	144°51'	32.623
28-00.0	50°00'	144°56'	32.620
29-00.0	50°05'	144°39'	32.622
30-00.0	50°12'	145°04'	32.624
65-07 - 01-00.0	50°07'	144°50'	32.664

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ARCTIC, HUDSON BAY AND HUDSON STRAIT

August 5 to October 4, 1962

NO. 4

1966 Data Record Series

Canadian Oceanographic Data Centre

Programmed by the
Canadian Committee on Oceanography

1966

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August 5 to October 4, 1962

CODC Reference: 359

NO. 4

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Canadian Oceanographic Data Centre
615 Booth St., Ottawa, Canada

Programmed by the Canadian Committee on Oceanography

DEPARTMENT OF MINES AND TECHNICAL SURVEYS
MARINE SCIENCES BRANCH

ARCTIC, HUDSON BAY, and HUDSON STRAIT

Ship: CCGS "John A. MacDonald"

Cruise period: August 5 to October 4, 1962

Observers: See Introduction Part I

BEDFORD INSTITUTE OF OCEANOGRAPHY, Dartmouth, N.S.
DIVISION OF OCEANOGRAPHIC RESEARCH, Ottawa, Ontario.

SECTION I

Description of data collection procedures

CCGS JOHN A MACDONALD
1962



Figure 1



Figure 2



Figure 3

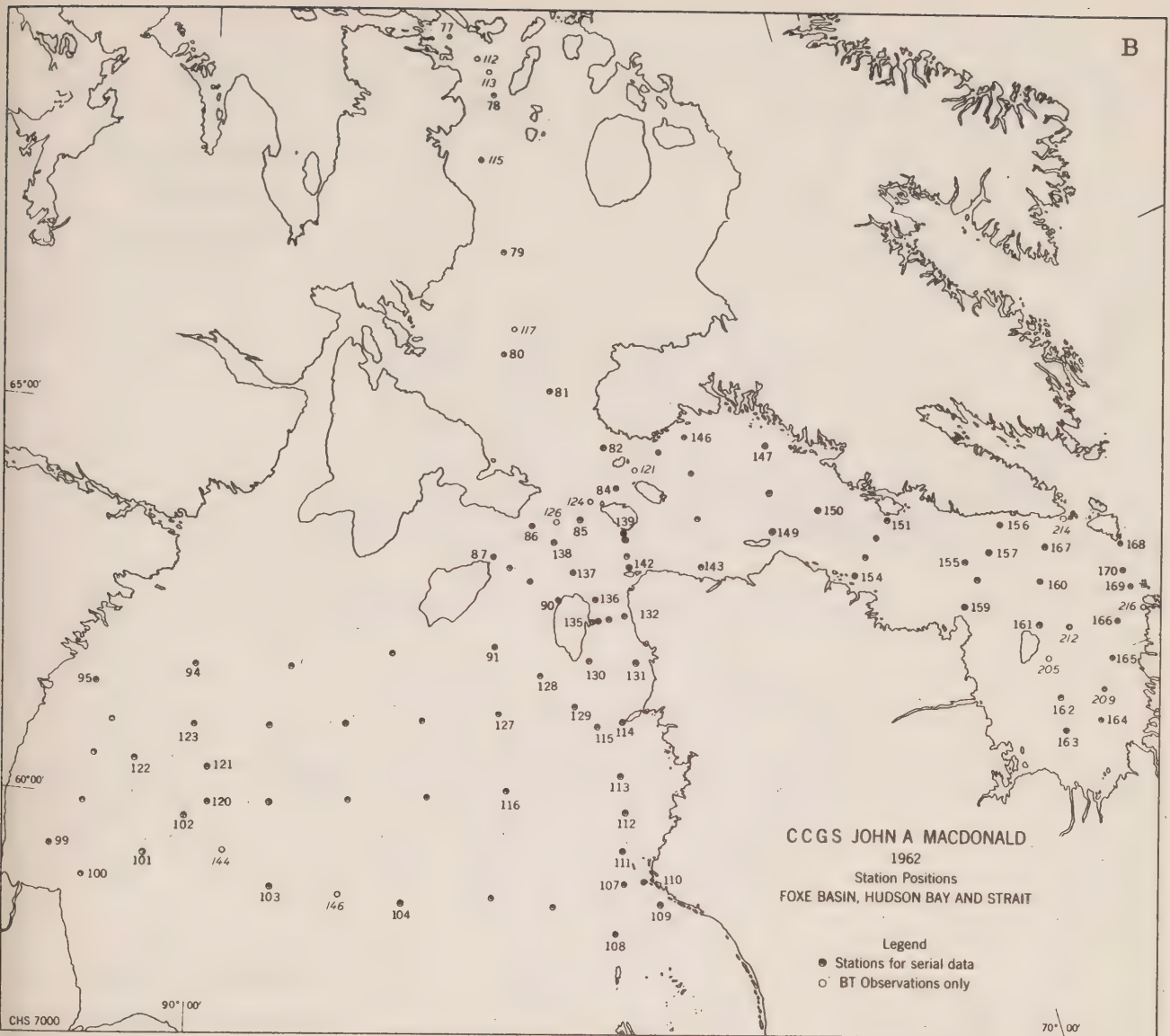


Figure 3

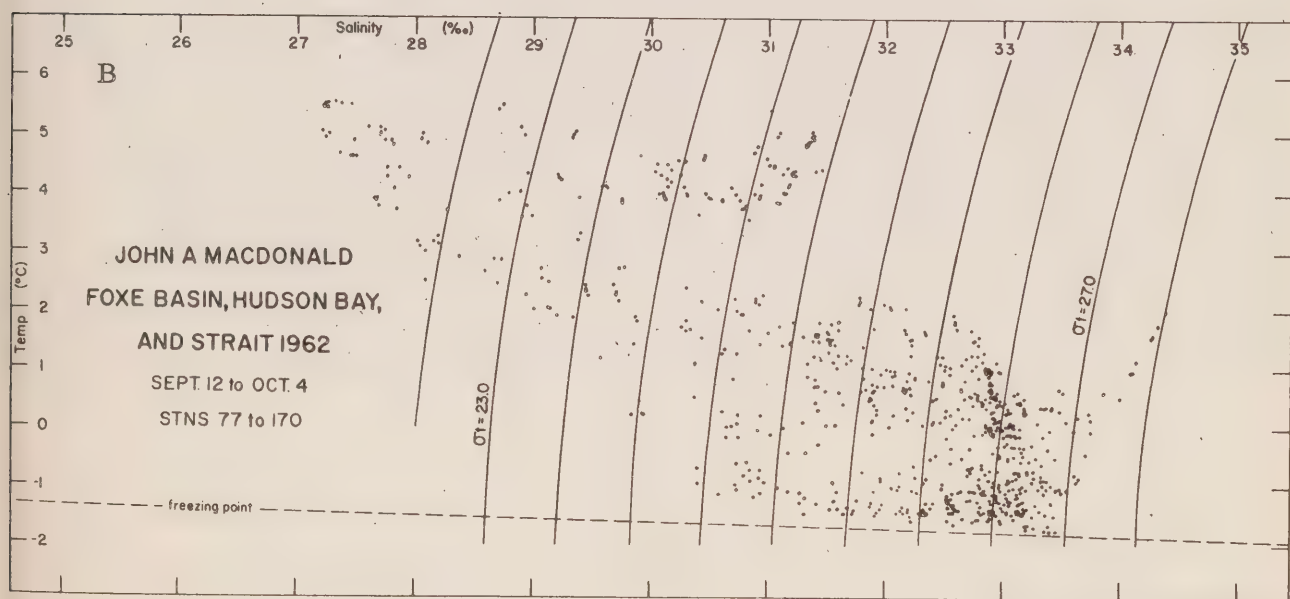
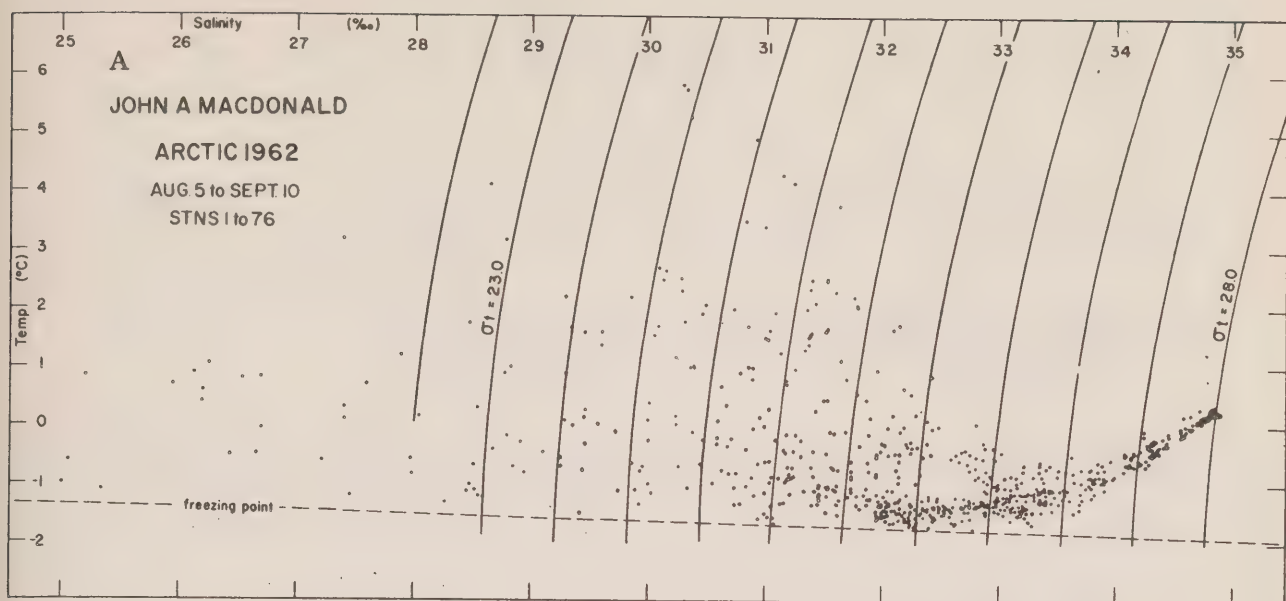


Figure 4

Figure captions

- Figure 1. Place names north of Fury and Hecla Strait referred to in the text.
- Figure 2. Track of vessels in the Arctic and Hudson Bay areas during the 1962 season which participated in hydrographic or oceanographic survey.
- Figure 3. The approximate positions of the stations occupied and BT lowerings of CCGS "John A. MacDonald".
- (a) North of Fury and Hecla Strait, (b) South of Fury and Hecla Strait.
- Figure 4. The T-S relation of the serial data observed at "John A. MacDonald" stations 1-170. Lines of constant σ_{θ} are indicated at intervals of 0.5 units of σ_{θ} .
- (a) From data at stations north of Fury and Hecla Strait.
- (b) From data at stations south of Fury and Hecla Strait.



JOHN A. MACDONALD

Dept. of Transport

INTRODUCTION

In the navigation season of 1962, the Department of Transport icebreaker CCGS "John A. MacDonald" was made available for oceanographic survey in waters of the Canadian Arctic and Hudson Bay. A general account of the work of this and other icebreakers during the season has been provided by Stead (1963) wherein it was noted that the "John A. MacDonald" was able to carry out physical oceanographic observations as far north as Nansen Sound and as far west as McClure Strait. Ford et al (1965) utilized part of the material. During the same season a programme of oceanographic observations was carried out in the CCGS "Labrador"; the track of the two vessels as well as of others involved in survey activity in 1962 in the Arctic is shown in Figure 2.

Information on ice conditions during the 1962 season is available in publications of the Meteorological Branch (Anon. 1963) and Black (1965) described ice conditions in the region of the Queen Elizabeth Islands.

This record consists mainly of serial temperature and salinity data and bathythermograms obtained on the survey of "John A. MacDonald" in which 170 stations were occupied and 218 bathythermograms obtained. In Figure 3, a and b, the approximate station and BT positions are indicated. It is noted that the positions of some of the stations occupied in Hudson Bay represent re-occupations of "Theta" stations occupied in the 1961 season (Anon., 1964 a and b).

The presentation of data in this report is subject to modification and possible correction at a later date. Errors including blunders are known to exist in the observed material, and in most instances these are presented without interpretation. The original records are filed with the Bedford Institute of Oceanography.

Extract of Cruise Log
(See Figure 1 for place names)

July 27	- Departed Quebec City.
August 5	- Lancaster Sound, occupied stns. 1-4.
6	- Prince Regent Inlet and Barrow Strait, occupied stns. 5-12.
7	- Griffith Island area, occupied stns. 13-15.
8	- Peel Sound, Lowther Island and McDougall Sound, occupied stns. 16-23.
14	- Grise Fiord, proceeding to Cape Sparbo, occupied stns. 24-29.
15	- Through Hell Gate to Norwegian Bay, anchored off Sherwood Head, occupied stns. 30-31.
19	- Dr. Ford joined.
23	- Tanquary Fiord, occupied stn. 32.
24	- Nansen Sound, occupied stns. 33-38.
25	- Eureka Sound, Norwegian Bay and Belcher Channel, occupied stns. 39-42.
26	- Penny Strait. Queens' Channel, and Wellington Channel, occupied stns. 43-47.
27	- Dr. Ford left.
30	- M'Clure Strait, occupied stns. 48-54.
31	- Viscount Melville Sound, occupied stns. 55-59.
Sept. 1	- Viscount Melville Sound off Byam Martin Island occupied stns. 60-61.
3	- Peel Sound. occupied stns. 62-64.
5	- M'Clintock Channel, occupied stns. 65-67.
6	- M'Clintock Channel, occupied stns. 68-69.
8	- Bellot Strait, occupied stns. 70-73.
9	- Gulf of Boothia, occupied stns. 74-76.
11	- Fury and Hecla Strait, occupied stn. 77.
12	- Proceeded to Foxe Basin, occupied stn. 78.
13	- Foxe Basin, occupied stns. 79-80.
14	- Occupied stns. 81-83.
15	- Occupied stns. 84-89.
16	- Hudson Bay, occupied stns. 90-92.
17	- occupied stns. 93-96.
18	- occupied stns. 97-99.
19	- occupied stns. 100-102.
20	- occupied stns. 103-106.
21	- occupied stns. 107-112.
22	- occupied stns. 113-117.
23	- occupied stns. 118-120.
24	- occupied stns. 121-124.
25	- occupied stns. 125-129.
26	- occupied stns. 130-137.
27	- Hudson Strait, occupied stns. 138-143.
29	- occupied stns. 144-146.
30	- occupied stns. 147-151.
Oct. 1	- occupied stns. 152-158.
2	- occupied stns. 159-162.
3	- occupied stns. 163-166.
4	- occupied stns. 167-170, proceeded Halifax.

OBSERVATIONAL PROCEDURES

At each station a BT lowering was generally made followed by the required casts for serial data. A bottom sample and vertical plankton haul were also frequently made. Knudsen type reversing bottles were utilized; each was fitted with two protected reversing thermometers. Surface and meteorological observations were obtained from the records of the Department of Transport ice observer.

Samples for dissolved oxygen determinations were drawn at some stations for immediate titration, and then samples for salinity determinations were drawn into standard type storage bottles with patent stoppers fitted with a renewable rubber gasket. These were stored in the ship for later determination upon arrival at Halifax. Samples for determinations of microplankton were drawn from the reversing bottles at some stations. The plankton haul was made to 150 m depth where possible, using a number 6 mesh Hensen net. The plankton samples and about half of the bottom samples were forwarded to the Arctic Biological Station of the Fisheries Research Board. The remaining bottom samples were returned to the Bedford Institute of Oceanography.

The tabulated depths were obtained through readings of the rope angle and of an uncalibrated meter block of standard type. The tabulated temperatures are the means of two readings of the two thermometers on each reversing bottle. Dissolved oxygen determinations were made using a modified Winkler procedure as described by Strickland et al (1960). Salinity determinations were made on a salinometer at the Bedford Institute of Oceanography.

The bathythermograms were copied from photographic prints; the slides were not available. They were drawn by hand on pre-printed forms and arranged chronologically; the circled number on each refers to the slide number of the table. For reference the serial temperature data have been indicated. The temperature-salinity relation of all the data is shown in Figure 4,a and b.

PERSONNEL

Messrs. J. Butters and B. Kelly were in the ship from departure to the return to Halifax. Dr. Wm. L. Ford participated during the period August 18 to 27. Mr. J. Lewis, the ice observer in the ship, provided the meteorological observations. Mr. Kelly prepared the record for publication.

Section II

Description of the machine-generated data records.

INTRODUCTION

This section applies to the machine processing phase of the data reduction and computation.

The oceanographic data previously recorded on CODC data summary forms, a sample of which is shown on the next page, are transferred to punch-cards for subsequent electronic data processing on an IBM 1620 computer, using CODC's OCEANS II program. In addition to computing routine derived quantities, the program carries out unit and format conversions, range checks, plausibility tests, internal editing, and if required, interpolation at standard oceanographic depths. When interpolations are carried out, additional derived values are computed.

After the data have been processed, the data record is prepared using an IBM 1401 computer configuration with the OCEAN REPORT III program, which provides for pre-edited high speed print-out on continuous direct-image masters. These masters subsequently yield the required volume of copies for distribution.

Provision has been made to enter an "estimate of precision" for each observed variable selected for interpolation at standard oceanographic depths. The precision depends on the instrument and/or technique used to determine the variable. A standard precision stated as a **standard deviation** (σ) can be determined for each instrument or technique under routine field conditions by making duplicate determinations of the variables for a homogeneous sample of sea water. These standard deviations are given for each cruise under "GENERAL INFORMATION" in section III of the data record.

The **measurement error estimate** of a specific observation in this data record, is stated as a multiple of the standard deviation derived as above, and entered in a column immediately to the right of the reported variable. In order to distinguish it from an additional decimal digit, the measurement error estimate is recorded alphabetically. (i.e., $1\sigma = A$, $2\sigma = B$, etc.; in this data record "A" is suppressed).

An option is provided with respect to the measurement of the salinity variable. If observed to three decimal digits, the last digit takes the place of the measurement error estimate.

In the past, a number of methods for both manual and machine interpolation have been developed. Studies and comparisons of the several methods have shown that no single method is universally acceptable. The manual methods are the most elaborate and flexible, but often require subjective decisions. In machine interpolation, all the present methods fail to yield acceptable results under some circumstances. Hence, it is considered necessary to qualify interpolated values by stating an "**interpolation error estimate**" derived from the particular interpolation formula used. There are two purposes in stating the error estimates; first, to give an indication of the quality of the interpolated data; second, to allow the oceanographer to redesign his observational procedures in order to reduce interpolation errors in future observations.

The interpolation scheme chosen for the OCEANS II program consists of a combination of two 3-point interpolations using the Lagrangian interpolation polynomial, as recommended by Rattray (1962). A parabola is fitted through three values of a given variable (T , S , O_2) considered as a function of depth. The two interpolation parabolas require a total of four points (observed depths). The middle points are common to both parabolas. The average of the two values obtained from the parabolas at standard depth is taken as the interpolated value, and a function of their difference as an estimate of the interpolation error.

This function combined with the "**measurement error estimate**" comprises the "**combined measurement and interpolation error estimate**". It is expressed as a multiple of the standard deviation of measurement (σ) under normal routine field conditions by:

CANADIAN OCEANOGRAPHIC DATA CENTRE

[illegible][illegible]

$$\frac{\sigma_i}{\sigma} = \left\{ \frac{(\Delta V_i)^2}{\sigma^2} + \sum_{n=j-2}^{j+1} (\gamma_n)^2 \left(\frac{\sigma_n}{\sigma} \right)^2 \right\}^{1/2}, \text{ where}$$

σ = Standard deviation of the combined error estimates at standard oceanographic depth,

ΔV_i = the interpolation error estimate of variable "V" at standard oceanographic depth = $^{1/3} (\bar{V}_{i_1} - V_{i_2})$

γ = Interpolation polynomial coefficient.

Z_j = Observed depth.

Z_i = Standard oceanographic depth, such that: $Z_{j-2} < Z_{j-1} < Z_i < Z_j < Z_{j+1}$

The integral part of the fraction $\frac{\sigma_i}{\sigma}$, if ≥ 2 , is reported in this Data Record following the interpolated variable. It represents the combined measurement and interpolation error estimate. In order to distinguish it from an additional decimal digit, it is recorded alphabetically (e.g.: 2 as "B", 3 as "C", etc.).

With respect to the interpolated value of the salinity variable if reported to three decimal digits, the interpolation error estimate is given only when $\frac{\sigma_i}{\sigma} \geq 2$ (the salinity is then recorded to two decimal places). If less than 2, the mean obtained from the two interpolation parabolas is reported to three decimal places.

EXPLANATION OF DATA RECORD HEADINGS

MASTER HEADINGS

(1) C-REF-NO	(6) YR	(11) DEPTH	(16) WAVES 1	(21) AIR T	(26) VIS
(2) CONS. NO	(7) MONTH	(12) MXSAMPD	(17) WAVES 2	(22) WET B	(27) STN
(3) LAT	(8) DAY	(13) NO. DPTH	(18) WND-DIR	(23) ww-CODE	
(4) LON	(9) HR	(14) W-COLOR	(19) WND-FCE	(24) CLD-TPE	
(5) MARSD SQ	(10) C/I	(15) W-TRNSP	(20) BARO	(25) CLD-AMT	(28) HW

(1) CRUISE REFERENCE NUMBER:

Assigned by the Institute. Commences with 001 at the beginning of each year (effective Jan. 1, 1963). Prior to that date the CRN was a number designated by CODC.

(2) CONSECUTIVE NUMBER:

Indicates the chronological order in which the stations were occupied.

(3) LATITUDE:

Indicate the position of the platform at the time of observation.

(4) LONGITUDE:

(5) MARSDEN SQUARE: Designates the geographic area code of the observation (see Marsden square chart).

(6) YEAR:

(7) MONTH:

(8) DAY:

(9) HOUR:

The time (Greenwich Mean Time) at which the surface environmental data were recorded. It is reported to tenths of hours (Table 1).
If an "X" precedes the value for HOUR, (prior to Jan. 1, 1963) it indicates that the reported time is doubtful.

(10) COUNTRY/
INSTITUTE:

The International Geophysical Year (IGY) Country Code/Institute Code - see Table 11.

(11) DEPTH:

The sounding reported in metres. If corrected, this is stated in the "GENERAL INFORMATION" chapter of section III. Charted depths are preceded by the letter "C".

(12) MAXIMUM

SAMPLING DEPTH: A code to indicate the deepest sampling depth (used for high speed sorting).

00 m - 50 m = 00

51 m - 150 m = 01

151 m - 250 m = 02

etc.

- (13) NUMBER OF DEPTHS: The number of levels observed (this is entered to initiate a computer safety check, guarding against the loss of punch-cards).
- (14) WATER COLOUR: The Forel-Ule Code (see table 2 and NOTE under FIELD "15" below).
- (15) WATER TRANSPARENCY: The depth in metres at which a Secchi disc (white disc, 30 cm. in diameter) just disappears from view, or the optical density expressed in percentage;
- NOTE: The "GENERAL INFORMATION" chapter in section III of the data record will state which method was used.
- (16) WAVES 1
($d_w d_w P_w H_w$ -code): The direction, period and height of the **wind-propagated** wave system. (See Tables 3, 4 and 5). Ref: World Meteorological Organization Codes 0885, 3155, 1555.
- (17) WAVES 2
($d_w d_w P_w H_w$ -code): The direction, period and height of the predominant **non-wind-propagated** wave system. (See Tables 3, 4 and 5). Ref: World Meteorological Organization Codes 0885, 3155, 1555.
- (18) WIND DIRECTION: The true direction to the nearest 10 degrees from which the wind is blowing (wind direction 990 means:—wind variable or direction unknown).
- (19) WIND FORCE
(WIND-FCE): Beaufort notation (See Table 6).
- WIND SPEED
(WIND-SPD): Anemometer reading reported in metres per second. Instrument height reported in "GENERAL INFORMATION" chapter of section III.
- (20) BAROMETER: The barometric pressure reported in millibars: the "GENERAL INFORMATION" chapter in Section III of the data record will state the type of instrument used.
- (21) AIR TEMPERATURE: In degrees Celsius.
- (22) WET BULB: In degrees Celsius.
- (23) ww CODE: Present Weather Code (See Table 7). Ref: WMO Code 4677
- (24) CLOUD TYPE: The type of predominating clouds (See Table 8). Ref: WMO Code 0500.
- (25) CLOUD AMOUNT: The sky coverage in eighths (See Table 9) Ref: WMO Code 2700
- (26) VISIBILITY: Visibility at the surface (See Table 10). Ref: WMO Code 4300.
- (27) STATION: A station reference number, assigned by the institute prior to, or during the survey.
- (28) HOURS AFTER HIGH WATER: Indicates the state of the tide for nearshore observations.

OBSERVED DATA HEADINGS

(1) GMT	(2) DEPTH	(3) TEMP	(4) SAL	(5) OXYGEN	(6) SGMT
(7) SOUND	(8) PO_4	(9) -P-	(10) NO_2	(11) NO_3	(12) SiO_2
				(13) pH.	

NOTE: Headings (1) to (7) will always be present. Headings (8) to (13) appear only when one or more additional chemical entries were made.

(1) G.M.T.: The Greenwich Mean Time of (in-situ) thermometer inversion and sea water sample collection.

When a multiple cast was initiated prior to and continued after midnight, the times indicated are uninterrupted by the change of day and appear beyond 24.0 hours. This will be accompanied by a statement: "MULTIPLE CAST CONTINUED NEXT DAY", which is printed following the last level of observed values.

(2) DEPTH: The depth in metres at the reversal time of deepest cast.

(3) TEMPERATURE: Temperatures from deepsea reversing thermometers, read to 0.01° C. Surface temperature measurement procedures are described in the chapter "OBSERVATION PROCEDURES" of section I, and/or the "GENERAL INFORMATION" chapter of section III. An alphabetical character following the temperature value represents the measurement error estimate referred to in the INTRODUCTION to this section.

(4) SALINITY: Salinity as defined by: $S = 0.03 + 1.805 C1\%$, reported in:
a. 1/100 parts per 1000, or
b. 1/1000 parts per 1000.

In case a: an alphabetical character following the value is the measurement error estimate as referred to under (3).

In case b: no error estimate indication is provided for, but an additional decimal digit takes its place.

(5) OXYGEN: The concentration of dissolved oxygen expressed in millilitres per litre to 2 decimal places. An alphabetical character following the value is the measurement error estimate as referred to under (3).

(6) SIGMA-T: The specific gravity anomaly as defined by: $(\text{Specific gravity} - 1) \times 10^3$ (e.g., σ_t reported as 2456, reads 24.56, and corresponds to a specific gravity of 1.02456).

(7) SOUND: The sound velocity is reported in m/sec. to 1 decimal place (e.g., 1437.9 m/sec.). The computation is carried out using Wilson's formula (1960), expressed in terms of temperature, salinity and total pressure.

(8) PO ₄	Phosphate-Phosphorus reported to hundredths of microgram-atoms per litre.
(9) -P-	Total Phosphorus reported to hundredths of microgram-atoms per litre.
(10) NO ₂	Nitrite-Nitrogen reported to hundredths of microgram-atoms per litre - No dissolved nitrogen included -
(11) NO ₃	Nitrate-Nitrogen reported to tenths of microgram-atoms per litre.
(12) SiO ₂	Silicate-Silicon reported in whole microgram-atoms per litre.
(13) pH	The pH value.

NOTE: "TRC" (trace) is reported when a chemical entry has a value less than the standard deviation of measurement for that particular variable.

INTERPOLATED DATA HEADINGS

(1) DEPTH	(2) TEMP	(3) SAL	(4) OXYGEN	(5) SGMT	(6) SOUND
(7) DELTA-D	(8) POT-EN	(9) SVA.			

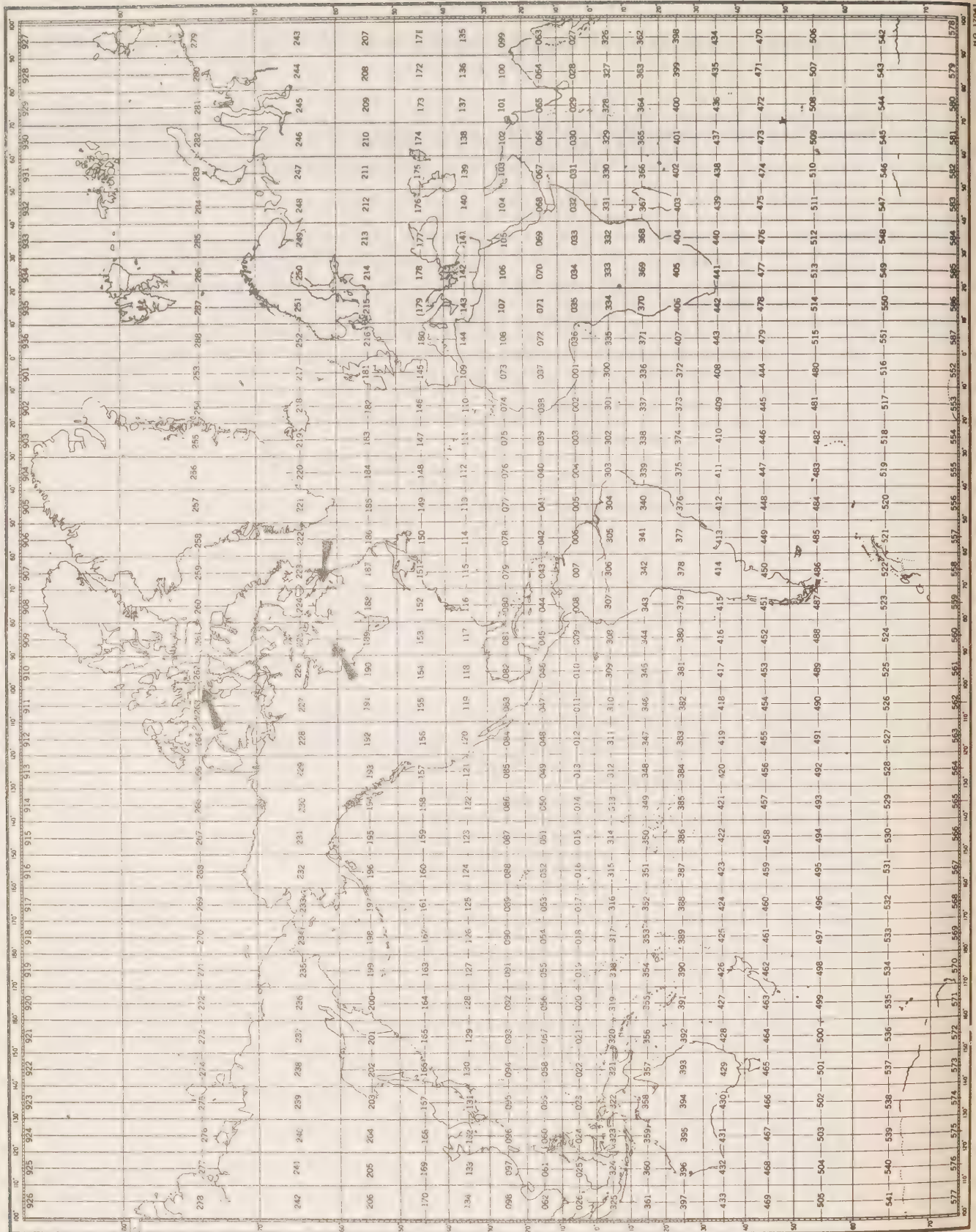
- (1) DEPTH: Standard Oceanographic Depth in whole metres, as well as additional depths: 125, 175, 225, 3500, 4500, 5500, 6500, 7500, 8500, 9500.
- (2) TEMPERATURE: Interpolated value at standard depth, followed by the **combined measurement and interpolation error estimate** (see "INTRODUCTION" to section II of the data record).
- (3) SALINITY:
- A. The reported salinity values are measured to three decimal places.
 - (i) the interpolation error estimate is less than twice the standard deviation of measurement
 - the interpolated value is reported to three decimal places (e.g., 30.139).
 - (ii) the interpolation error estimate is equal to or greater than twice the standard deviation of measurement.
 - the interpolated value is reported to two decimal places, and followed by the **interpolation error estimate** (e.g., 29.23 C).
 - B. The reported salinity values are measured to two decimal places and followed by the measurement error estimate.
 - the interpolated value is reported to two decimal places, and followed by the **combined measurement and interpolation error estimate** (e.g., 30.59 B).
- (4) OXYGEN: Interpolated value at standard depth, followed by the **combined measurement and interpolation error estimate** (see "Introduction" to section II of the data record).

- (5) SIGMA-T: Computed from temperature and salinity values at standard oceanographic depth.
- (6) SOUND VELOCITY: Computed from temperature, salinity and total pressure values at standard oceanographic depth, using Wilson's formula (1960).
- (7) DELTA-D: The geo-potential anomaly as defined by:
- $$\Delta D = \int_0^p \delta dp$$
- ΔD is expressed in dynamic metres (10^5 ergs/gram) and recorded to three decimal places (e.g., 2.345 dyn. metres).
- (8) POTENTIAL ENERGY ANOMALY: The Potential energy anomaly χ as defined by:
- $$\chi = 1/g \int_0^p \rho \delta dp = \int_0^z \rho p \delta dz$$
- χ is expressed in units of 10^8 ergs/cm² and recorded to two decimal places (e.g., 116.44).
- (9) SPECIFIC VOLUME ANOMALY: The specific volume anomaly as defined by:
- $$\delta = \alpha - \alpha_{35.0.P}$$
- δ is expressed in ml/gr, and conventionally reported as $10^5 \delta$, to one decimal place (i.e., δ reported as 1234, reads 123.4, and corresponds to a specific volume anomaly of 0.001234 ml/gr.).

SPECIAL CHARACTERS

‡ (Record mark): is used to indicate inconsistencies which are printed in an area below the "Observed Data". A corresponding record mark at the extreme left hand side indicates the level at which the inconsistency occurs

* (Asterisk): this character may occur in the **interpolated** portion of the data record. It is printed at the extreme left hand side of the page, when three or more standard depth levels fall within any one **observed depth interval**. The **third**, and all consequent levels are preceded by the asterisk to indicate that more than **two** machine interpolations were carried out, utilizing the same set of interpolation parabolas. The asterisk will also appear when the last standard depth is an extrapolation and there are at least two interpolations between the last two observed depths.



MARSDEN SQUARE CHART

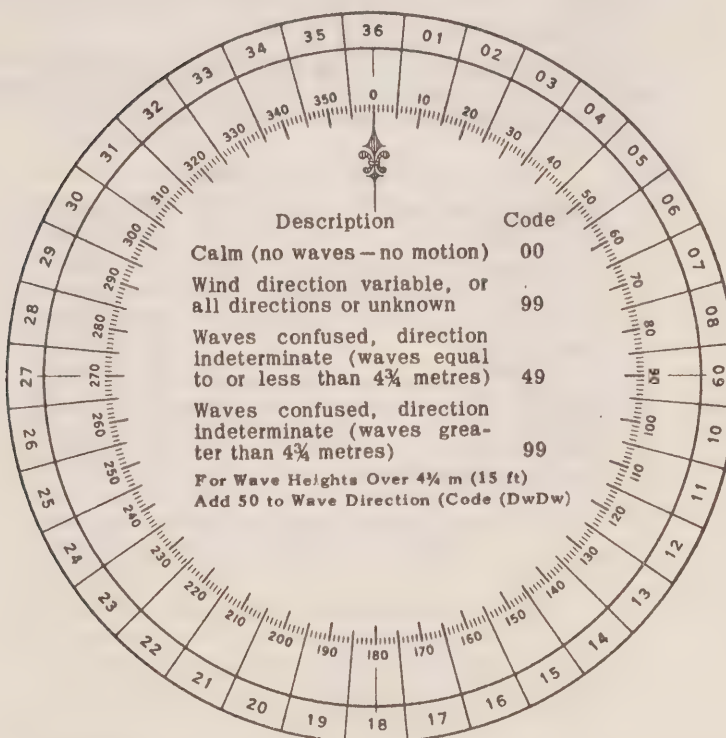
Table 1
CONVERSION
MINUTES TO $\frac{1}{4}_0$ HRS.

Minutes	Tenths Hrs.
00-03	0
04-08	1
09-15	2
16-20	3
21-27	4
28-32	5
33-39	6
40-44	7
45-51	8
52-56	9
57-59	0 (next HR.)

Table 2
WATER COLOR CODE
Based on Percentage Yellow

Code:	Description
00	Deep Blue
10	Blue
20	Greenish Blue
30	Bluish Green
40	Green
50	Light Green
60	Yellowish Green
70	Yellow Green
80	Green Yellow
90	Greenish Yellow
99	Yellow

Table 3. DIRECTION CODE (dd)



NOTE:

Always use the true direction from which the wind is blowing, or the direction from which Waves I (sea), or Waves II (swell) come.

Table 4. PERIOD OF THE WAVES (P_w)
(Measure to the Nearest Second)

Code:	Period in Seconds:	Code:	Period in Seconds:
2	5 sec. or less	8	16 or 17 sec.
3	6 or 7 sec.	9	18 or 19 sec.
4	8 or 9 sec.	0	20 or 21 sec.
5	10 or 11 sec.	1	Over 21 sec.
6	12 or 13 sec.	X	Calm, or period not determined
7	14 or 15 sec.		

Table 5. HEIGHT OF THE WAVES (H_w)

- The average value of the wave height (vertical distance between trough and crest) is reported, as obtained from the larger well formed waves of the wave system being observed.
- Each code figure provides for reporting a range of heights. For example: 1 = $\frac{1}{4}$ m (1 ft) to $\frac{3}{4}$ m ($2\frac{1}{2}$ ft); 5 = $2\frac{1}{4}$ m (7 ft) to $2\frac{3}{4}$ m (9 ft); 9 = $4\frac{1}{4}$ m ($13\frac{1}{2}$ ft) to $4\frac{3}{4}$ m (15 ft), etc.
- If a wave height comes exactly midway between the heights corresponding to two code figures, the lower code figure is reported; e.g. a height of $2\frac{3}{4}$ m is reported by code figure 5.

Code			Code
0	Less than ¼ m (1 ft)	Add 50 to Dw Dw	0 5 m (16 ft)
1	½ m (1½ ft)		1 5½ m (17½ ft)
2	1 m (3 ft)		2 6 m (19 ft)
3	1½ m (5 ft)		3 6½ m (21 ft)
4	2 m (6½ ft)		4 7 m (22½ ft)
5	2½ m (8 ft)		5 7½ m (24 ft)
6	3 m (9½ ft)		6 8 m (25½ ft)
7	3½ m (11 ft)		7 8½ m (27 ft)
8	4 m (13 ft)		8 9 m (29 ft)
9	4½ m (14 ft)		9 9½ m (30½ ft) or more
x	Height not determined		

Table 6. WIND FORCE CODE

The Beaufort force of the wind is estimated from the appearance of the sea surface, according to the table below. This table is only intended as a guide to show roughly what may be expected on the open sea, remote from land. Factors which must be taken into account are the "lag" effect between the wind increasing and the sea getting up; and the influence of "fetch", depth, swell, heavy rain and tide effect on the appearance of the sea. Estimation of the wind force by this method becomes unreliable in shallow water or when close inshore, owing to the tidal effect and the shelter provided by the land.

Code	Appearance of sea if fetch and duration of the blow have been sufficient to develop the sea fully	Description
00	Sea like a mirror	Calm
01	Ripples with the appearance of scales are formed, but without foam crests,	Light Air
02	Small wavelets; crests have a glassy appearance and do not break.	Light Breeze
03	Large wavelets; crests begin to break; foam of glassy appearance; perhaps scattered white horses.	Gentle Breeze
04	Small waves, becoming longer; fairly frequent white horses.	Moderate breeze
05	Moderate waves; many white horses are formed (chance of some spray)	Fresh Breeze
06	Large waves; white foam crests everywhere (probably some spray)	Strong Breeze
07	Sea heaps up and white foam from breaking waves begins to be blown in streaks along the direction of the wind.	Near Gale
08	Moderately high waves; edges of crests begin to break into the spindrift; foam is blown in well-marked streaks along the direction of the wind.	Gale
09	High waves; dense streaks of foam along wind; crests begin to topple, tumble and roll over; spray may affect visibility.	Strong Gale
10	Very high waves with long overhanging crests; foam in great patches blown in dense white streaks along wind; sea surface takes a white appearance; tumbling becomes heavy and shock-like; visibility affected.	Storm
11	Exceptionally high waves (medium sized ships may be lost to view behind waves); sea covered with long white patches of foam lying along the wind; everywhere edges of crests are blown into froth; visibility affected.	Violent Storm
12	Air is filled with foam and spray; sea completely white with driving spray; visibility seriously affected.	Hurricane

Table 7. PRESENT WEATHER

W.W. CODE

NO PRECIPITATION ON STATION AT TIME OF OBSERVATION

Code figure		ww
No meteors except photometeors	{	00 Cloud development not observed or not observable
		01 Clouds generally dissolving or becoming less developed
		02 State of sky on the whole unchanged
		03 Clouds generally forming or developing
Haze, dust, sand or smoke	{	04 Visibility reduced by smoke, e.g. veldt or forest fires, industrial smoke or volcanic ashes
		05 Haze
		06 Widespread dust in suspension in the air, not raised by wind at or near the station at the time of observation
		07 Dust or sand raised by wind at or near the station at the time of observation, but no well developed dust whirl(s) or sand whirl(s), and no duststorm or sandstorm seen
		08 Well developed dust whirl(s) or sand whirl(s) seen at or near the station during the preceding hour or at the time of observation, but no dustorm or sandstorm
		09 Duststorm or sandstorm within sight at the time of observation, or at the station during the preceding hour
		10 Mist
		11 { Patches of { shallow fog or ice fog at the station, whether on land or sea, not
		12 { More of less { deeper than about 2 metres on continuous land or 10 metres at sea
		13 Lightning visible, no thunder heard
		14 Precipitation within sight, not reaching the ground or the surface of the sea
		15 Precipitation within sight, reaching the ground or the surface of the sea, but distant (i.e. estimated to be more than 5 km) from the station
		16 Precipitation within sight, reaching the ground or the surface of the sea, near to, but not at the station
		17 Thunderstorm, but no precepitation at the time of observation
		18 Squalls { at or within sight of the station during the preceding hour
19 Funnel clouds { or at the time of observation		

ww = 20 - 29	Precipitation, fog, ice fog or thunderstorm at the station during the preceding hour but not at the time of observation	
20	Drizzle (not freezing) or snow grains	
21	Rain (not freezing)	
22	Snow	
23	Rain and snow or ice pellets, type (a)	
24	Freezing drizzle or freezing rain	
25	Shower(s) of rain	
26	Shower(s) of snow, or of rain and snow	
27	Shower(s) of hail, or of rain and hail	
28	Fog or ice fog	
29	Thunderstorm (with or without precipitation)	
ww = 30 - 39	Duststorm, sandstorm, drifting or blowing snow	
30	{ Slight or moderate duststorm or sandstorm { - has decreased during the preceding hour	
31		- no appreciable change during the preceding hour
32		- has begun or has increased during the preceding hour
33	{ Severe duststorm or sandstorm { - has decreased during the preceding hour	
34		- no appreciable change during the preceding hour
35		- has begun or has increased during the preceding hour
36	Slight or moderate blowing snow { generally low (below eye level)	
37	Heavy drifting snow {	
38	Slight or moderate blowing snow { generally high (above eye level)	
39	Heavy blowing snow {	
ww = 40 - 49	Fog or ice fog at the time of observation	
40	Fog or ice fog at a distance at the time of observation, but not at the station during the preceding hour, the fog or ice fog extending to a level above that of the observer	
41	Fog or ice fog in patches	
42	Fog or ice fog, sky visible { has become thinner during the preceding hour	
43	Fog or ice fog, sky invisible {	
44	Fog or ice fog, sky visible { no appreciable change during the preceding hour	
45	Fog or ice fog, sky invisible {	
46	Fog or ice fog, sky visible { has begun or has become thicker during the preceding hour	
47	Fog or ice fog, sky invisible {	
48	Fog, depositing rime, sky visible	
49	Fog, depositing rime, sky invisible	

NO PRECIPITATION ON STATION AT TIME OF OBSERVATION

PRECIPITATION ON STATION AT TIME OF OBSERVATION

ww = 50 - 59 Drizzle

- | | | | |
|----|--|---|--------------------------------------|
| 50 | Drizzle, not freezing, intermittent | { | slight at time of observation |
| 51 | Drizzle, not freezing, continuous | | |
| 52 | Drizzle, not freezing, intermittent | { | moderate at time of observation |
| 53 | Drizzle, not freezing, continuous | | |
| 54 | Drizzle, not freezing, intermittent | { | heavy (dense) at time of observation |
| 55 | Drizzle, not freezing, continuous | | |
| 56 | Drizzle, freezing, slight | | |
| 57 | Drizzle, freezing, moderate or heavy (dense) | | |
| 58 | Drizzle and rain, slight | | |
| 59 | Drizzle and rain, moderate or heavy | | |

ww = 60 - 69 Rain

- | | | | |
|----|---|---|---------------------------------|
| 60 | Rain, not freezing, intermittent | { | slight at time of observation |
| 61 | Rain, not freezing, continuous | | |
| 62 | Rain, not freezing, intermittent | { | moderate at time of observation |
| 63 | Rain, not freezing, continuous | | |
| 64 | Rain, not freezing, intermittent | { | heavy at time of observation |
| 65 | Rain, not freezing, continuous | | |
| 66 | Rain, freezing, slight | | |
| 67 | Rain, freezing, moderate or heavy | | |
| 68 | Rain or drizzle and snow, slight | | |
| 69 | Rain or drizzle and snow, moderate or heavy | | |

70 - 79 Solid precipitation not in showers

- | | | | |
|----|---|---|---------------------------------|
| 70 | Intermittent fall of snow flakes | { | slight at time of observation |
| 71 | Continuous fall of snow flakes | | |
| 72 | Intermittent fall of snow flakes | { | moderate at time of observation |
| 73 | Continuous fall of snow flakes | | |
| 74 | Intermittent fall of snow flakes | { | heavy at time of observation |
| 75 | Continuous fall of snow flakes | | |
| 76 | Ice prisms (with or without fog) | | |
| 77 | Snow grains (with or without fog) | | |
| 78 | Isolated starlike snow crystals (with or without fog) | | |
| 79 | Ice pellets, type (a) | | |

ww = 80 - 99 Showery precipitation, or precipitation with current or recent thunderstorm

- | | | | |
|----|--|---|---|
| 80 | Rain shower(s), slight | | |
| 81 | Rain shower(s), moderate or heavy | | |
| 82 | Rain shower(s), violent | | |
| 83 | Shower(s) of rain and snow mixed, slight | | |
| 84 | Shower(s) of rain and snow mixed, moderate or heavy | | |
| 85 | Snow shower(s), slight | | |
| 86 | Snow shower(s), moderate or heavy | | |
| 87 | Shower(s) of snow pellets or ice pellets, type (b), with or without rain or rain and snow mixed | { | - slight |
| 88 | | | |
| 89 | Shower(s) of hail, with or without rain or rain and snow mixed, not associated with thunder | { | - moderate or heavy |
| 90 | | | |
| 91 | Slight rain at time of observation | { | thunderstorm during the preceding hour but not at time of observation |
| 92 | Moderate or heavy rain at time of observation | | |
| 93 | Slight snow, or rain and snow mixed or hail at time of observation | { | |
| 94 | Moderate or heavy snow, or rain and snow mixed or hail at time of observation | | |
| 95 | Thunderstorm, slight or moderate, without hail, but with rain and/or snow at time of observation | { | thunderstorm at time of observation |
| 96 | Thunderstorm, slight or moderate, with hail at time of observation | | |
| 97 | Thunderstorm, heavy, without hail, but with rain and/or snow at time of observation | { | |
| 98 | Thunderstorm, combined with duststorm or sandstorm at time of observation | | |
| 99 | Thunderstorm, heavy, with hail at time of observation | | |

PRECIPITATION ON STATION AT TIME OF OBSERVATION

Table 8. CLOUD TYPE CODE

Code	Cloud Type	Code	Cloud Type
0	Cirrus Ci	5	Nimbostratus Ns
1	Cirrocumulus Cc	6	Stratocumulus Sc
2	Cirrostratus Cs	7	Stratus St
3	Alto cumulus Ac	8	Cumulus Cu
4	Altostratus As	9	Cumulonimbus Cb
X	Cloud not visible owing to darkness, fog, dust storm, sand storm, or other analogous phenomena		

Table 9. CLOUD AMOUNT CODE

Code	Cloud Cover	Code	Cloud Cover
0	0	6	6 oktas
1	1 okta or less, but not zero	7	7 oktas or more, but not 8 oktas
2	2 oktas	8	8 oktas
3	3 oktas	9	Sky obscured, or cloud amount cannot be estimated
4	4 oktas		
5	5 oktas		

Note: 1 okta = $\frac{1}{8}$ of the sky covered

Table 10. VISIBILITY

Code	Estimate of hor. Visibility
0	Less than 50 metres (less than 55 yards)
1	50-200 metres (approx. 55-220 yards)
2	200-500 metres (approx. 220-550 yards)
3	500-1,000 metres (approx. 550 yards- $\frac{1}{2}$ n.m.)
4	1-2 km (approx. $\frac{3}{4}$ -1 n.m.)
5	2-4 km (approx. 1-2 n.m.)
6	4-10 km (approx. 2-6 n.m.)
7	10-20 km (approx. 6-12 n.m.)
8	20-50 km (approx. 12-30 n.m.)
9	50 km or more (30 n.m. or more)

Note: n.m. = nautical mile

Table 11

CCO Institute Code

01. Atlantic Oceanographic Group.
02. Pacific Oceanographic Group.
03. Biological Station, St. Andrews, N.B.
04. Arctic Biological Station, St. Anne de Bellevue, P.Q.
05. Biological Station, St. John's Nfld.
06. Station de Biologie Marine, Grande Riviere, P.Q.
07. Canadian Hydrographic Service.
08. Naval Research Establishment, Dartmouth, N.S.
09. Pacific Naval Laboratory, Esquimalt, B.C.
10. Bedford Institute of Oceanography.
11. Polar Continental Shelf Project.
12. Great Lakes Institute.
13. Inland Region, Oceanographic Research, Ottawa.
14. Institute of Oceanography, Dalhousie University.

SECTION III

Serial oceanographic data

GENERAL INFORMATION

<u>Institute:</u>	Bedford Institute of Oceanography
<u>Observation platform:</u>	CCGS "John A. MacDonald"
<u>Vessel's cruising speed:</u>	14 knots
<u>Total number of stations occupied:</u>	170
<u>Barometer readings</u>	Mercury Barometer
<u>Air temperature</u>	Fixed thermometer
<u>Surface sea water temperature</u>	Hand held bucket thermometer

The following Standard Deviations were used to express both measurement and interpolation error estimates:

Temperature	0.02
Salinity	0.004
Oxygen	0.05

C-REF-NO 359	YR 1962	DEPTH 428	WAVES 1 00X0	AIR T 08.3	VIS 8
CONS. NO 001	MONTH 8	MXSAMPD 02	WAVES 2 X0	WET B	STN 001
LAT 74-26 N	DAY 05	NO.DPTH 10	WND-DIR CALM	WW-CODE 00	
LON 87-00 W	HR 23.4	W-COLOR	WND-SPD 00	CLD-TPE	
MARSD SQ 261	C/I 1810	W-TRNSP	BARO 1018.	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
234	0000	0820	22160		1723	14672
234	0010	0491	30926		2448	14654
234	0020	0430	31162		2473	14633
234	0030	-0031	32031		2575	14442
234	0050	-0132	32755		2637	14409
234	0075	-0150	33044		2660	14408
234	0100	-0151	33165		2670	14414
234	0150	-0141	33462		2694	14431
234	0200	-0140	33690		2713	14443
234	0250	-0105	33914		2730	14471

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0820	22160		1723	14672	0000	00000	10416
0010	0491	30926		2448	14654	0069	00002	3458
0020	0430	31162		2473	14633	0103	00007	3222
0030	-0031	32031		2575	14442	0131	00014	2253
0050	-0132	32755		2637	14409	0170	00029	1664
0075	-0150	33044		2660	14408	0209	00054	1436
0100	-0151	33165		2670	14414	0244	00085	1341
0125	-0146	3331 B		2682	14422	0276	00122	1227
0150	-0141	33462		2694	14431	0306	00164	1113
0175	-0142	33581		2704	14436	0333	00208	1020
0200	-0140	33690		2713	14443	0357	00256	0936
0225	-0120 B	33812		2722	14458	0380	00305	0848
0250	-0105	33914		2730	14471	0400	00354	0775

C-REF-NO 359	YR 1962	DEPTH 424	WAVES 1 08X1	AIR T	VIS 8
CONS. NO 002	MONTH 8	MXSAMPD 03	WAVES 2 X0	WET B	STN 002
LAT 74-15 N	DAY 06	NO.DPTH 11	WND-DIR 090	WW-CODE	
LON 87-00 W	HR 01.1	W-COLOR	WND-SPD 01	CLD-TPE 1	
MARSD SQ 261	C/I 1810	W-TRNSP	BARO 1018.	CLD-AMT 1	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
011	0000	0350	30840		2455	14591
011	0010	0196	31082		2486	14529
011	0020	-0123	31894		2567	14396
011	0030	-0140	32280		2598	14395
011	0050	-0121	32702		2632	14413
011	0075	-0133	32973		2654	14415
011	0100	-0136	33127		2667	14420
011	0150	-0130	33363		2686	14435
011	0200	-0113	33702		2713	14456
011	0250	-0086	33980		2734	14480
011	0300	-0043	34152		2746	14511

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0350	30840		2455	14591	0000	00000	3393
0010	0196	31082		2486	14529	0033	00002	3096
0020	-0123	31894		2567	14396	0060	00006	2330
0030	-0140	32280		2598	14395	0082	00011	2029
0050	-0121	32702		2632	14413	0119	00026	1708
0075	-0133	32973		2654	14415	0160	00052	1495
0100	-0136	33127		2667	14420	0196	00084	1374
0125	-0135	3325 B		2676	14427	0229	00123	1283
0150	-0130	33363		2686	14435	0261	00166	1192
0175	-0123	3353 B		2699	14444	0289	00214	1066
0200	-0113	33702		2713	14456	0314	00262	0936
0225	-0101	33851		2724	14467	0337	00310	0825
0250	-0086	33980		2734	14480	0356	00358	0733
0300	-0043	34152		2746	14511	0390	00454	0620

-REF-NO 359	YR 1962	DEPTH 474	WAVES 1 12X2	AIR T 05.6	VIS B
ONS. NO 003	MONTH 8	MXSAMPD 04	WAVES 2 XO	WET B	STN 003
AT 74-04 N	DAY 06	NO.DPTH 12	WND-DIR 120	WW-CODE	
ON 87-00 W	HR 02.9	W-COLOR	WND-SPD 05	CLD-TPE	
ARSD SQ 261	C/I 1810	W-TRNSP	BARO 1018.	CLD-AMT 0	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
029	0000	0130	31340		2511	14501
029	0010	0140	31375		2514	14508
029	0020	-0074	32129		2584	14422
029	0030	-0115	32216		2593	14406
029	0050	-0140	32368		2606	14399
029	0075	-0144	32603		2625	14405
029	0100	-0136	32819		2642	14416
029	0150	-0134	33075		2663	14429
029	0200	-0123	33244		2676	14444
029	0250	-0129	33454		2693	14453
029	0300	-0119	33799		2721	14471
029	0400	-0014	34241		2752	14542

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0130	31340		2511	14501	0000	00000	2859
0010	0140	31375		2514	14508	0029	00001	2838
0020	-0074	32129		2584	14422	0054	00005	2164
0030	-0115	32216		2593	14406	0075	00011	2084
0050	-0140	32368		2606	14399	0116	00027	1959
0075	-0144	32603		2625	14405	0163	00057	1776
0100	-0136	32819		2642	14416	0206	00095	1611
0125	-0134	3297 B		2654	14423	0245	00140	1496
0150	-0134	33075		2663	14429	0281	00192	1411
0175	-0128	3316 B		2669	14437	0316	00249	1345
0200	-0123	33244		2676	14444	0349	00313	1283
0225	-0126	33338		2684	14448	0381	00381	1208
0250	-0129	33454		2693	14453	0410	00453	1117
0300	-0119	33799		2721	14471	0460	00592	0855
0400	-0014	34241		2752	14542	0531	00842	0566

C-REF-NO 359	YR 1962	DEPTH 360	WAVES 1 09X3	AIR T 05.6	VIS 8
CONS. NO 004	MONTH 8	MXSAMPD 03	WAVES 2 X0	WET B	STN 004
LAT 73-53 N	DAY 06	NO.DPTH 11	WND-DIR 090	WW-CODE 00	
LON 87-00 W	HR 04.9	W-COLOR	WND-SPD 08	CLD-TPE	
MARSD SQ 261	C/I 1810	W-TRNSP	BARO 1018.	CLD-AMT 0	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
049	0000	0020	32100		2578	14462
049	0010	-0048	32120		2583	14432
049	0020	-0059	32154		2586	14429
049	0030	-0123	32352		2604	14404
049	0050	-0140	32544		2620	14402
049	0075	-0137	32702		2632	14410
049	0100	-0131	32865		2646	14419
049	0150	-0134	33176		2671	14430
049	0200	-0130	33690		2712	14447
049	0250	-0112	33308		2681	14459
049	0300	-0045	34086		2741	14509

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0020	32100		2578	14462	0000	00000	2223
0010	-0048	32120		2583	14432	0022	00001	2180
0020	-0059	32154		2586	14429	0044	00004	2150
0030	-0123	32352		2604	14404	0065	00010	1978
0050	-0140	32544		2620	14402	0103	00025	1824
0075	-0137	32702		2632	14410	0147	00054	1702
0100	-0131	32865		2646	14419	0189	00090	1577
0125	-0132	3301 B		2657	14425	0227	00134	1464
0150	-0134	33176		2671	14430	0262	00184	1334
0175	-0133	3348 I		2695	14439	0293	00235	1103
0200	-0130	33690		2712	14447	0319	00284	0939
0225	-0125	3348 I		2695	14451	0344	00341	1098
0250	-0112	33308		2681	14459	0374	00412	1235
0300	-0045	34086		2741	14509	0422	00544	0669

C-REF-NO 359	YR 1962	DEPTH 282	WAVES 1 X0	AIR T 03.3	VIS 9
CONS. NO 005	MONTH 8	MXSAMPD 02	WAVES 2 X0	WET B	STN 005
LAT 73-01 N	DAY 06	NO.DPTH 10	WND-DIR 220	WW-CODE 03	
LN 89-38 W	HR 12.4	W-COLOR	WND-SPD 04	CLD-TPE 2	
MARSD SQ 261	C/I 1810	W-TRNSP	BARO 1016.	CLD-AMT 4	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
124	0000	0072	30850		2475	14468
124	0010	-0061	31003		2493	14411
124	0020	-0152	31993		2575	14383
124	0030	-0158	32147		2588	14384
124	0050	-0170	32274		2599	14384
124	0075	-0172	32413		2610	14389
124	0100	-0163	32603		2625	14400
124	0150	-0142	32968		2654	14423
124	0200	-0117	33319		2682	14448
124	0250	-0106	33566		2701	14465

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0072	30850		2475	14468	0000	00000	3202
0010	-0061	31003		2493	14411	0031	00002	3032
0020	-0152	31993		2575	14383	0058	00005	2247
0030	-0158	32147		2588	14384	0080	00011	2127
0050	-0170	32274		2599	14384	0122	00028	2025
0075	-0172	32413		2610	14389	0171	00060	1915
0100	-0163	32603		2625	14400	0218	00101	1769
0125	-0153	32788		2640	14411	0260	00150	1628
0150	-0142	32968		2654	14423	0300	00206	1491
0175	-0129	33151		2669	14436	0336	00265	1353
0200	-0117	33319		2682	14448	0368	00327	1227
0225	-0112	3344 B		2692	14456	0398	00392	1133
0250	-0106	33566		2701	14465	0425	00459	1040

C-REF-NO 359	YR 1962	DEPTH 476	WAVES 1 00X0	AIR T 06.7	VIS 8
CONS. NO 006	MONTH 8	MXSAMPD 04	WAVES 2 X0	WET B	STN 006
LAT 73-11 N	DAY 06	NO.DPTH 12	WND-DIR CALM	WW-CODE	
LON 90-08 W	HR 14.9	W-COLOR	WND-SPD 00	CLD-TPE 2	
MARSD SQ 262	C/I 1810	W-TRNSP	BARO 1016.	CLD-AMT 4	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
149	0000	0339	31010		2470	14589
149	0010	0152	31033		2485	14509
149	0020	-0042	31994		2572	14435
149	0030	-0112	32322		2601	14409
149	0050	-0142	32533		2619	14401
149	0075	-0145	32722		2634	14406
149	0100	-0143	32890		2648	14414
149	0150	-0142	33147		2669	14426
149	0200	-0118	33483		2695	14450
149	0250	-0084	33865		2725	14480
149	0300	-0045	34073		2740	14509
149	0400	-0006	34240		2752	14546

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0339	31010		2470	14589	0000	00000	3256
0010	0152	31033		2485	14509	0032	00002	3105
0020	-0042	31994		2572	14435	0059	00006	2278
0030	-0112	32322		2601	14409	0081	00011	2004
0050	-0142	32533		2619	14401	0119	00027	1832
0075	-0145	32722		2634	14406	0163	00055	1684
0100	-0143	32890		2648	14413	0204	00091	1554
0125	-0144	3302 B		2658	14419	0242	00135	1452
0150	-0142	33147		2669	14426	0277	00185	1354
0175	-0132	33307		2681	14437	0310	00239	1233
0200	-0118	33483		2695	14450	0340	00295	1102
0225	-0102	3368 B		2711	14465	0365	00351	0954
0250	-0084	33865		2725	14480	0388	00406	0821
0300	-0045	34073		2740	14509	0426	00512	0679
0400	-0006	34240		2752	14546	0489	00736	0572

C-REF-NO 359	YR 1962	DEPTH 302	WAVES 1 03X3	AIR T 04.4	VIS 9
CONS. NO 007	MONTH 8	MXSAMPD 03	WAVES 2 X0	WET B	STN 007
LAT 73-18 N	DAY 06	NO.DPTH 10	WND-DIR 030	WW-CODE	
LOH 90-46 W	HR 17.0	W-COLOR	WND-SPD 05	CLD-TPE 2	
MARSD SQ 262	C/I 1810	W-TRNSP	BARO 1014.	CLD-AMT 4	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
170	0000	0200	31360		2508	14533
170	0020	0111	31656		2538	14500
170	0030	-0107	32059		2580	14407
170	0050	-0155	32364		2606	14392
170	0075	-0152	32581		2623	14401
170	0100	-0136	32768		2638	14415
170	0150	-0140	33065		2662	14426
170	0200	-0144	33294		2681	14435
170	0250	-0102	33757		2717	14470
170	0300	-0063	34079		2741	14501

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0200	31360		2508	14533	0000	00000	2887
0010	0115 I	3156 I		2530	14499	0028	00001	2685
0020	0111	31656		2538	14500	0055	00005	2607
0030	-0107	32059		2580	14407	0079	00012	2207
0050	-0155	32364		2606	14392	0121	00029	1959
0075	-0152	32581		2623	14401	0168	00059	1791
0100	-0136	32768		2638	14415	0211	00097	1650
0125	-0135	32927		2651	14422	0251	00143	1526
0150	-0140	33065		2662	14426	0288	00195	1417
0175	-0145	3317 C		2670	14429	0323	00253	1334
0200	-0144	33294		2681	14435	0355	00315	1237
0225	-0126	3352 D		2698	14451	0385	00378	1069
0250	-0102	33757		2717	14470	0409	00439	0896
0300	-0063	34079		2741	14501	0449	00548	0666

C-REF-NO 359	YR 1962	DEPTH 137	WAVES 1 07X2	AIR T 05.6	VIS 9
CONS. NO 008	MONTH 8	MXSAMPD 01	WAVES 2 X0	WET B	STN 008
LAT 74-07 N	DAY 07	NO.DPTH 7	WND-DIR 070	WW-CODE	
LON 92-00 W	HR 01.9	W-COLOR	WND-SPD 05	CLD-TPE	
MARSD SQ 262	C/I 1810	W-TRNSP	BARO 1012.	CLD-AMT 0	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
019	0000		28970			
019	0010	0018	30245		2429	14437
019	0020	-0069	31392		2525	14414
019	0030	-0134	31978		2574	14393
019	0050	-0142	32392		2608	14399
019	0075	-0131	32890		2648	14415
019	0100	-0124	32993		2656	14424

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0100	28970		2323	14455	0000	00000	4653
0010	0018	30245		2429	14437	0042	00002	3641
0020	-0069	31392		2525	14414	0074	00007	2731
0030	-0134	31978		2574	14393	0099	00013	2262
0050	-0142	32392		2608	14399	0141	00030	1940
0075	-0131	32890		2648	14415	0185	00058	1559
0100	-0124	32993		2656	14424	0223	00092	1481

C-REF-NO 359	YR 1962	DEPTH 300	WAVES 1 07X1	AIR T 03.3	VIS 9
CONS. NO 009	MONTH 8	MXSAMPD 02	WAVES 2 10X0	WET B	STN 009
LAT 74-23 N	DAY 07	NO.DPTH 10	WND-DIR 070	WW-CODE	
LON 92-00 W	HR 04.1	W-COLOR	WND-SPD 03	CLD-TPE 4	
MARSD SQ 262	C/I 1810	W-TRNSP	BARO 1011.	CLD-AMT 7	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
041	0000		28830	879		
041	0010	0102	30393	985	2437	14477
041	0020	-0052	31965	992	2570	14430
041	0030	-0126	32476	765	2614	14404
041	0050	-0035	32882	776	2644	14456
041	0075	-0096	33010	696	2656	14433
041	0100	-0113	33115	685	2665	14431
041	0150	-0125	33372	656	2686	14437
041	0200	-0123	33720	635	2714	14451
041	0250	-0112	33819	697	2722	14466

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0078	28830	879	2313	14443	0000	00000	4750
0010	0102	30393	985	2437	14477	0042	00002	3566
0020	-0052	31965	992	2570	14430	0071	00006	2297
0030	-0126	32476	765	2614	14404	0092	00011	1882
0050	-0035	32882	776	2644	14456	0127	00025	1600
0075	-0096	33010	696	2656	14433	0166	00050	1478
0100	-0113	33115	685	2665	14431	0202	00082	1391
0125	-0122	33234	671	2675	14432	0236	00121	1295
0150	-0125	33372	656	2686	14437	0267	00165	1187
0175	-0125	3356 D	640	2701	14444	0295	00212	1045
0200	-0123	33720	635	2714	14451	0320	00259	0919
0225	-0119	3375 F	667	2717	14457	0343	00309	0895
0250	-0112	33819	697	2722	14466	0365	00363	0845

C-REF-NO 359	YR 1962	DEPTH 121	WAVES 1 09X1	AIR T 05.0	VIS 9
CONS. NO 010	MONTH 8	MXSAMPD 01	WAVES 2 X0	WET B	STN 010
LAT 74-40 N	DAY 07	NO.DPTH 7	WND-DIR 090	WW-CODE	
LON 92-00 W	HR 06.6	W-COLOR	WND-SPD 03	CLD-TPE 4	
MARSD SQ 262	C/I 1810	W-TRNSP	BARO 1011.	CLD-AMT 7	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
066	0000	0583	30300		2389	14682
066	0010	0576	30339		2393	14681
066	0020	0250	31406		2508	14559
066	0030	0000	32194		2587	14459
066	0050	-0109	32880		2646	14421
066	0075	-0127	33070		2662	14419
066	0100	-0145	33240		2676	14417

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0583	30300		2389	14682	0000	00000	4025
0010	0576	30339		2393	14681	0040	00002	3989
0020	0250	31406		2508	14559	0075	00007	2887
0030	0000	32194		2587	14459	0100	00013	2141
0050	-0109	32880		2646	14421	0138	00028	1575
0075	-0127	33070		2662	14419	0175	00052	1422
0100	-0145	33240		2676	14417	0209	00082	1285

C-REF-NO 359	YR 1962	DEPTH 157	WAVES 1 14X2	AIR T 05.0	VIS 8
CONS. NO 011	MONTH 8	MXSAMPD 01	WAVES 2 XO	WET B	STN 011
LAT 74-40 N	DAY 07	NO.DPTH 8	WND-DIR 140	WW-CODE	
LON 92-43 W	HR 08.4	W-COLOR	WND-SPD 05	CLD-TPE 4	
MARSD SQ 262	C/I 1810	W-TRNSP	BARO 1011.	CLD-AMT 7	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
084	0000	0528	30370		2401	14660
084	0010	0080	31701		2543	14485
084	0020	-0003	32435		2606	14459
084	0030	-0088	32810		2640	14427
084	0050	-0140	33108		2665	14410
084	0075	-0140	33182		2671	14415
084	0100	-0153	33225		2675	14414
084	0150	-0145	33373		2687	14428

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0528	30370		2401	14660	0000	00000	3914
0010	0080	31701		2543	14485	0033	00001	2556
0020	-0003	32435		2606	14459	0055	00005	1956
0030	-0088	32810		2640	14427	0073	00009	1637
0050	-0140	33108		2665	14410	0104	00021	1391
0075	-0140	33182		2671	14415	0138	00043	1333
0100	-0153	33225		2675	14413	0171	00073	1295
0125	-0147 B	3331 B		2682	14422	0203	00110	1233
0150	-0145	33373		2687	14428	0233	00153	1180

C-REF-NO 359	YR 1962	DEPTH 135	WAVES 1 14X0	AIR T 05.6	VIS 8
CONS. NO 012	MONTH 8	MXSAMPD 01	WAVES 2 X0	WET B	STN 012
LAT 74-40 N	DAY 07	NO.DPTH 7	WND-DIR 140	WW-CODE 80	
LON 93-21 W	HR 10.1	W-COLOR	WND-SPD 05	CLD-TPE 6	
MARSD SQ 262	C/I 1810	W-TRNSP	BARO 1008.	CLD-AMT 9	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
101	0000	0417	31250		2482	14625
101	0010	0097	31965		2563	14497
101	0020	0021	32299		2594	14468
101	0030	-0040	32721		2631	14448
101	0050	-0051	32819		2639	14447
101	0075	-0054	32874		2644	14451
101	0100	-0052	32965		2651	14457

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0417	31250		2482	14625	0000	00000	3142
0010	0097	31965		2563	14497	0028	00001	2364
0020	0021	32299		2594	14468	0050	00005	2071
0030	-0040	32721		2631	14448	0069	00009	1722
0050	-0051	32819		2639	14447	0103	00023	1642
0075	-0054	32874		2644	14451	0144	00049	1597
0100	-0052	32965		2651	14457	0183	00085	1527

C-REF-NO 359	YR 1962	DEPTH 117	WAVES 1 16X2	AIR T 05.6	VIS 7
CONS. NO 013	MONTH 8	MXSAMPD 01	WAVES 2 XO	WET B	STN 013
LAT 74-37 N	DAY 07	NO.DPTH 7	WND-DIR 160	WW-CODE	
LON 95-00 W	HR 16.9	W-COLOR	WND-SPD 07	CLD-TPE 6	
MARSD SQ 262	C/I 1810	W-TRNSP	BARO 1004.	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
169	0000	0250	30130		2407	14538
169	0010	0220	29862		2387	14523
169	0020	-0008	31680		2546	14446
169	0030	-0081	32328		2601	14423
169	0050	-0064	32733		2633	14440
169	0075	-0083	32933		2650	14438
169	0100	-0114	33198		2672	14431

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0250	30130		2407	14538	0000	00000	3855
0010	0220	29862		2387	14523	0040	00002	4039
0020	-0008	31680		2546	14446	0073	00007	2532
0030	-0081	32328		2601	14423	0096	00012	2008
0050	-0064	32733		2633	14440	0133	00027	1703
0075	-0083	32933		2650	14438	0174	00053	1542
0100	-0114	33198		2672	14431	0210	00085	1327

C-REF-NO 359	YR 1962	DEPTH 179	WAVES 1 09X3	AIR T 01.7	VIS 5
CONS. NO 014	MONTH 8	MXSAMPD 01	WAVES 2 09X0	WET B	STN 014
LAT 74-22 N	DAY 07	NO.DPTH 8	WND-DIR 090	WW-CODE	
LON 95-00 W	HR 19.9	W-COLOR	WND-SPD 11	CLD-TPE 0	
MARSD SQ 262	C/I 1810	W-TRNSP	BARO 1001.	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
199	0000	0161	29610		2371	14492
199	0010	0139	29605		2372	14483
199	0020	0234	31387		2508	14552
199	0030	0045	31875		2559	14475
199	0050	-0058	32669		2627	14442
199	0075	-0111	32908		2648	14425
199	0100	-0146	33001		2657	14414
199	0150	-0109	33470		2694	14446

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0161	29610		2371	14492	0000	00000	4195
0010	0139	29605		2372	14483	0042	00002	4187
0020	0234	31387		2508	14551	0078	00007	2890
0030	0045	31875		2559	14475	0104	00014	2406
0050	-0058	32669		2627	14442	0146	00030	1754
0075	-0111	32908		2648	14425	0188	00057	1551
0100	-0146	33001		2657	14414	0226	00091	1468
0125	-0140	3326 H		2678	14424	0260	00130	1267
0150	-0109	33470		2694	14446	0290	00172	1118

C-REF-NO 359	YR 1962	DEPTH 194	WAVES 1 06X0	AIR T 03.9	VIS 7
CONS. NO 015	MONTH 8	MXSAMPD 01	WAVES 2 X0	WET B	STN 015
LAT 74-07 N	DAY 07	NO.DPTH 8	WND-DIR 070	WW-CODE 52	
LON 95-00 W	HR 21.9	W-COLOR	WND-SPD 13	CLD-TPE 7	
MARSD SQ 262	C/I 1810	W-TRNSP	BARO 1000.	CLD-AMT 9	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
219	0000	0000	30990		2490	14437
219	0010	-0011	31582		2538	14442
219	0020	-0060	31740		2552	14423
219	0030	-0086	31742		2553	14413
219	0050	-0117	31961		2572	14404
219	0075	-0138	32357		2605	14404
219	0100	-0133	32637		2627	14415
219	0150	-0121	32637		2627	14429

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0000	30990		2490	14437	0000	00000	3064
0010	-0011	31582		2538	14442	0029	00001	2606
0020	-0060	31740		2552	14423	0054	00005	2467
0030	-0086	31742		2553	14413	0079	00012	2456
0050	-0117	31961		2572	14404	0126	00031	2278
0075	-0138	32357		2605	14404	0180	00065	1966
0100	-0133	32637		2627	14415	0227	00106	1751
0125	-0135 B	3271 B		2633	14419	0270	00156	1694
0150	-0121	32637		2627	14429	0313	00218	1751

C-REF-NO 359	YR 1962	DEPTH 205	WAVES 1 06X0	AIR T 02.2	VIS 6
CONS. NO 016	MONTH 8	MXSAMPD 02	WAVES 2 X0	WET B	STN 016
LAT 74-00 N	DAY 07	NO.DPTH 9	WND-DIR 060	WW-CODE 53	
LON 95-34 W	HR 23.7	W-COLOR	WND-SPD 11	CLD-TPE 7	
MARSD SQ 262	C/I 1810	W-TRNSP	BARO 999.	CLD-AMT 9	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
237	0000	0100	30890		2477	14482
237	0010	0100	30863		2475	14483
237	0020	-0013	31173		2505	14437
237	0030	-0112	31743		2554	14400
237	0050	-0142	32108		2585	14395
237	0075	-0136	32532		2619	14408
237	0100	-0128	32762		2637	14419
237	0150	-0119	33072		2662	14436
237	0200	-0113	33277		2678	14450

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0100	30890		2477	14482	0000	00000	3186
0010	0100	30863		2475	14483	0032	00002	3206
0020	-0013	31173		2505	14437	0063	00006	2918
0030	-0112	31743		2554	14400	0090	00013	2448
0050	-0142	32108		2585	14395	0136	00032	2159
0075	-0136	32532		2619	14408	0187	00063	1833
0100	-0128	32762		2637	14419	0230	00103	1657
0125	-0123	32936		2651	14428	0270	00149	1523
0150	-0119	33072		2662	14436	0308	00201	1419
0175	-0115	3320 B		2672	14443	0342	00258	1321
0200	-0113	33277		2678	14450	0375	00321	1261

C-REF-NO 359	YR 1962	DEPTH 212	WAVES 1 07X3	AIR T 02.2	VIS 6
CONS. NO 017	MONTH 8	MXSAMPD 02	WAVES 2 XO	WET B	STN 017
LAT 74-02 N	DAY 08	NO.DPTH 9	WND-DIR 070	WW-CODE	
LON 96-35 W	HR 01.8	W-COLOR	WND-SPD 09	CLD-TPE 7	
MARSD SQ 262	C/I 1810	W-TRNSP	BARO 998.	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
018	0000	0100	28830		2312	14453
018	0009	0090	28773		2308	14450
018	0019	0030	31034		2492	14455
018	0028	-0051	31317		2518	14423
018	0046	-0133	32046		2579	14397
018	0069	-0136	32497		2616	14406
018	0091	-0128	32794		2640	14418
018	0139	-0118	33119		2666	14435
018	0185	-0111	33261		2677	14448

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0100	28830		2312	14453	0000	00000	4760
0010	0086	2899 I		2325	14451	0047	00002	4630
0020	0021	3111 G		2498	14452	0085	00008	2983
0030	-0064	3140 B		2525	14418	0114	00015	2725
0050	-0138 B	3215 C		2588	14397	0163	00035	2128
0075	-0134	32589		2623	14409	0212	00066	1789
0100	-0126	3288 B		2646	14422	0254	00103	1568
0125	-0120	3306 B		2661	14431	0292	00146	1432
0150	-0115	3321 F		2673	14439	0327	00195	1318
0175	-0112	3326 B		2677	14446	0360	00250	1275

C-REF-NO 359	YR 1962	DEPTH 267	WAVES 1 04X2	AIR T 02.2	VIS 5
CONS. NO 018	MONTH 8	MXSAMPD 02	WAVES 2 X0	WET B	STN 018
LAT 74-04 N	DAY 08	NO.DPTH 10	WND-DIR 040	WW-CODE	
LON 97-30 W	HR 03.9	W-COLOR	WND-SPD 09	CLD-TPE 7	
MARSD SQ 262	C/I 1810	W-TRNSP	BARO 998.	CLD-AMT 9	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
039	0000	-0033	31820		2558	14434
039	0010	-0088	30880		2484	14396
039	0020	-0112	31477		2533	14395
039	0030	-0142	32019		2577	14390
039	0050	-0147	32344		2604	14396
039	0075	-0147	32544		2620	14403
039	0100	-0135	32834		2643	14416
039	0150	-0110	33370		2686	14444
039	0200	-0093	33713		2713	14465
039	0250	-0085	33794		2719	14478

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	-0033	31820		2558	14434	0000	00000	2416
0010	-0088	30880		2484	14396	0028	00002	3119
0020	-0112	31477		2533	14395	0057	00006	2653
0030	-0142	32019		2577	14390	0081	00012	2229
0050	-0147	32344		2604	14396	0124	00029	1976
0075	-0147	32544		2620	14403	0172	00060	1820
0100	-0135	32834		2643	14416	0215	00098	1599
0125	-0122	3312 B		2666	14431	0252	00141	1384
0150	-0110	33370		2686	14444	0285	00186	1194
0175	-0100	33570		2702	14455	0313	00233	1043
0200	-0093	33713		2713	14465	0338	00281	0935
0225	-0088	33776		2718	14472	0361	00331	0888
0250	-0085	33794		2719	14478	0383	00385	0875

C-REF-NO 359	YR 1962	DEPTH 134	WAVES 1 07X3	AIR T 02.2	VIS 5
CONS. NO 019	MONTH 8	MXSAMPD 01	WAVES 2 X0	WET B	STN 019
LAT 74-12 N	DAY 08	NO.DPTH 7	WND-DIR 040	WW-CODE	
LON 98-00 W	HR 05.9	W-COLOR	WND-SPD 12	CLD-TPE 1	
MARSD SQ 262	C/I 1810	W-TRNSP	BARO 998.	CLD-AMT 9	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
059	0000	0028	29470		2366	14429
059	0010	0016	29463		2366	14425
059	0020	-0114	31471		2532	14394
059	0030	-0134	31875		2565	14392
059	0050	-0140	32399		2608	14400
059	0075	-0132	32879		2647	14414
059	0100	-0111	33351		2684	14435

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0028	29470		2366	14429	0000	00000	4239
0010	0016	29463		2366	14425	0043	00002	4240
0020	-0114	31471		2532	14394	0077	00007	2657
0030	-0134	31875		2565	14392	0102	00013	2341
0050	-0140	32399		2608	14400	0145	00031	1936
0075	-0132	32879		2647	14414	0190	00058	1567
0100	-0111	33351		2684	14435	0225	00089	1211

C-REF-NO 359	YR 1962	DEPTH 143	WAVES 1 03X0	AIR T 02.8	VIS 8
CONS. NO 020	MONTH 8	MXSAMPD 01	WAVES 2 X0	WET B	STN 020
LAT 74-42 N	DAY 08	NO.DPTH 7	WND-DIR	WW-CODE 01	
LON 98-00 W	HR 10.1	W-COLOR	WND-SPD 13	CLD-TPE 6	
MARSD SQ 262	C/I 1810	W-TRNSP	BARO 1000.	CLD-AMT 7	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
101	0000	0044	31510		2530	14465
101	0010	-0013	31899		2563	14446
101	0020	-0008	32165		2585	14453
101	0030	-0028	32382		2603	14449
101	0050	-0042	32682		2628	14450
101	0075	-0076	32889		2646	14441
101	0100	-0087	33059		2660	14442

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0044	31510		2530	14465	0000	00000	2685
0010	-0013	31899		2563	14446	0025	00001	2363
0020	-0008	32165		2585	14453	0048	00005	2161
0030	-0028	32382		2603	14449	0069	00010	1986
0050	-0042	32682		2628	14450	0107	00025	1750
0075	-0076	32889		2646	14441	0149	00052	1578
0100	-0087	33059		2660	14442	0187	00086	1442

C-REF-NO 359	YR 1962	DEPTH 51	WAVES 1 02X0	AIR T 03.3	VIS 8
CONS. NO 021	MONTH 8	MXSAMPD 00	WAVES 2 X0	WET B	STN 021
LAT 74-57 N	DAY 08	NO.DPTH 5	WND-DIR 020	WW-CODE 01	
LON 98-00 W	HR 12.5	W-COLOR	WND-SPD 10	CLD-TPE 6	
MARSD SQ 262	C/I 1810	W-TRNSP	BARO 1002.	CLD-AMT 7	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
125	0000	-0056	29260		2352	14387
125	0010	-0080	28947		2328	14373
125	0020	-0063	29870		2402	14396
125	0030	-0014	31270		2513	14440
125	0050	-0034	32274		2595	14448

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	-0056	29260		2352	14387	0000	00000	4374
0010	-0080	28947		2328	14373	0045	00002	4608
0020	-0063	29870		2402	14396	0088	00009	3901
0030	-0014	31270		2513	14440	0122	00017	2842
0050	-0034	32274		2595	14448	0171	00037	2065

C-REF-NO 359	YR 1962	DEPTH 243	WAVES 1 01X3	AIR T 04.4	VIS 8
CONS. NO 022	MONTH 8	MXSAMPD 02	WAVES 2 X0	WET B	STN 022
LAT 74-57 N	DAY 08	NO.DPTH 9	WND-DIR 010	WW-CODE	
LON 97-12 W	HR 14.9	W-COLOR	WND-SPD 08	CLD-TPE 3	
MARSD SQ 262	C/I 1810	W-TRNSP	BARO 1002.	CLD-AMT 7	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
149	0000	0167	32100		2570	14528
149	0010	0174	32155		2574	14534
149	0020	0088	32428		2601	14501
149	0030	0000	32487		2610	14463
149	0050	-0070	32803		2639	14438
149	0075	-0085	32947		2651	14437
149	0100	-0104	33057		2660	14434
149	0150	-0131	33204		2673	14432
149	0200	-0122	33316		2682	14446

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0167	32100		2570	14528	0000	00000	2303
0010	0174	32155		2574	14534	0023	00001	2266
0020	0088	32428		2601	14501	0044	00004	2006
0030	0000	32487		2610	14463	0064	00009	1917
0050	-0070	32803		2639	14438	0100	00024	1647
0075	-0085	32947		2651	14437	0140	00049	1530
0100	-0104	33057		2660	14434	0178	00083	1438
0125	-0121	33139		2667	14432	0213	00124	1368
0150	-0131	33204		2673	14432	0247	00171	1314
0175	-0128	33272		2678	14438	0279	00225	1261
0200	-0122	33316		2682	14446	0310	00286	1228

C-REF-NO 359	YR 1962	DEPTH 82	WAVES 1 02X2	AIR T 06.7	VIS 8
CONS. NO 023	MONTH 8	MXSAMPD 01	WAVES 2 X0	WET B	STN 023
LAT 74-55 N	DAY 08	NO.DPTH 6	WND-DIR 020	WW-CODE	
LON 96-28 W	HR 17.0	W-COLOR	WND-SPD 05	CLD-TPE 3	
MARSD SQ 262	C/I 1810	W-TRNSP	BARO 1002.	CLD-AMT 2	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
170	0000	0167	31530		2524	14520
170	0010	0066	32188		2583	14486
170	0020	0012	32393		2602	14466
170	0030	-0048	32643		2625	14443
170	0050	-0095	32919		2649	14428
170	0075	-0118				

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0167	31530		2524	14520	0000	00000	2736
0010	0066	32188		2583	14486	0025	00001	2178
0020	0012	32393		2602	14466	0046	00004	1995
0030	-0048	32643		2625	14443	0065	00009	1779
0050	-0095	32919		2649	14428	0098	00023	1550
0075	-0118							

C-REF-NO 359	YR 1962	DEPTH 732	WAVES 1 04X0	AIR T 04.4	VIS 8
CONS. NO 024	MONTH 8	MXSAMPD 07	WAVES 2 X0	WET B	STN 024
LAT 76-01 N	DAY 14	NO.DPTH 14	WND-DIR 090	WW-CODE 02	
LON 81-23 W	HR 10.6	W-COLOR	WND-SPD 03	CLD-TPE 6	
MARSD SQ 261	C/I 1810	W-TRNSP	BARO 1006.	CLD-AMT 5	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
106	0000	0378	31640	896	2516	14614
106	0010	0230	31611	926	2526	14551
106	0020	0055	32257	710	2589	14483
106	0030	-0054	32595	777	2621	14440
106	0050	-0099	32978	782	2654	14427
106	0075	-0092	33200	712	2671	14438
106	0100	-0108	33404	628	2688	14437
106	0150	-0145	33641	600	2709	14431
106	0200	-0095	33918	549	2730	14467
106	0300	-0062	34122	549	2745	14502
106	0400	-0032	34278	582	2756	14534
106	0500	-0023	34327	572	2760	14556
106	0600	-0021	34348		2761	14574
106	0700	-0018				

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0378	31640	896	2516	14614	0000	00000	2813
0010	0230	31611	926	2526	14551	0028	00001	2717
0020	0055	32257	710	2589	14483	0052	00005	2119
0030	-0054	32595	777	2621	14439	0072	00010	1813
0050	-0099	32978	782	2654	14427	0105	00023	1503
0075	-0092	33200	712	2671	14438	0141	00046	1334
0100	-0108	33404	628	2688	14437	0173	00074	1171
0125	-0132 B	3353 C	604 B	2700	14432	0201	00106	1062
0150	-0145	33641	600	2709	14431	0226	00143	0975
0175	-0124 B	3378 B	574	2720	14447	0250	00181	0871
0200	-0095	33918	549	2730	14467	0270	00221	0778
0225	-0082 B	3399 C	541	2735	14478	0289	00262	0725
0250	-0073 B	3405 D	538	2740	14488	0307	00306	0683
0300	-0062	34122	549	2745	14502	0340	00399	0634
0400	-0032	34278	582	2756	14534	0399	00607	0528
0500	-0023	34327	572	2760	14556	0451	00846	0494
0600	-0021	34348		2761	14574	0500	01123	0478
0700	-0018							

C-REF-NO 359	YR 1962	DEPTH 40	WAVES 1 32X3	AIR T 02.2	VIS 4
CONS. NO 025	MONTH 8	MXSAMPD 00	WAVES 2 X0	WET B	STN 025
LAT 75-39 N	DAY 15	NO.DPTH 4	WND-DIR 320	WW-CODE	
LON 87-00 W	HR 03.7	W-COLOR	WND-SPD 06	CLD-TPE	
MARSD SQ 261	C/I 1810	W-TRNSP	BARO 1011.	CLD-AMT 9	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
037	0000	0250	31530		2518	14557
037	0010	0044	31546		2532	14467
037	0020	-0029	32213		2589	14444
037	0030	-0037	32267		2594	14443

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0250	31530		2518	14557	0000	00000	2793
0010	0044	31546		2532	14467	0027	00001	2657
0020	-0029	32213		2589	14444	0051	00005	2115
0030	-0037	32267		2594	14443	0072	00010	2071

C-REF-NO 359	YR 1962	DEPTH 402	WAVES 1 32X3	AIR T 02.8	VIS 8
CONS. NO 026	MONTH 8	MXSAMPD 03	WAVES 2 X0	WET B	STN 026
LAT 75-52 N	DAY 15	NO.DPTH 10	WND-DIR 320	WW-CODE	
LON 87-00 W	HR 05.5	W-COLOR	WND-SPD 08	CLD-TPE 6	
MARSD SQ 261	C/I 1810	W-TRNSP	BARO 1010.	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
055	0000	0317	28780		2294	14549
055	0010	0055	31792		2552	14475
055	0020	-0027	32251		2592	14446
055	0030	-0048	32427		2607	14440
055	0050	-0091	32878		2645	14430
055	0075	-0086	33165		2668	14440
055	0100	-0075	33335		2682	14452
055	0150	-0073	33522		2697	14463
055	0200	-0085	33774		2718	14470
055	0300	-0051	34127		2745	14507

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0317	28780		2294	14549	0000	00000	4928
0010	0055	31792		2552	14475	0037	00001	2474
0020	-0027	32251		2592	14446	0060	00005	2087
0030	-0048	32427		2607	14440	0080	00010	1944
0050	-0091	32878		2645	14430	0116	00024	1582
0075	-0086	33165		2668	14440	0153	00047	1363
0100	-0075	33335		2682	14452	0186	00077	1236
0125	-0071	3344 C		2690	14459	0216	00111	1158
0150	-0073	33522		2697	14463	0244	00151	1091
0175	-0079	33647		2707	14466	0271	00195	0992
0200	-0085	33774		2718	14470	0294	00241	0892
0225	-0073 C	3384 E		2723	14480	0316	00288	0843
0250	-0067 B	3394 D		2730	14488	0337	00338	0772
0300	-0051	34127		2745	14507	0372	00437	0635

C-REF-NO 359 YR 1962 DEPTH 616 WAVES 1 33X2 AIR T 03.9 VIS 8
 CONS. NO 027 MONTH 8 MXSAMPD 06 WAVES 2 X0 WET B STN 027
 LAT 76-05 N DAY 15 NO.DPTH 13 WND-DIR 330 WW-CODE
 LON 87-00 W HR 08.5 W-COLOR WND-SPD 03 CLD-TPE 3
 MARSD SQ 261 C/I 1810 W-TRNSP BARO 1010. CLD-AMT 7 HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
085	0000	0344	29510	966	2350	14571
085	0010	0164	31047		2486	14514
085	0020	0016	31907	896	2563	14461
085	0030	-0044	32257	662	2594	14439
085	0050	-0084	32836	606	2642	14432
085	0075	-0084	33108	628	2664	14440
085	0100	-0084	33309	582	2680	14447
085	0150	-0075	33575	572	2701	14463
085	0200	-0071	33782	582	2718	14476
085	0300	-0045	34182	457	2749	14510
085	0400	-0029	34276	457	2756	14536
085	0500	-0025	34312	435	2758	14555
085	0600	-0020	34332	416	2760	14574

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0344	29510	966	2350	14571	0000	00000	4395
0010	0164	31047	889 G	2486	14514	0038	00002	3102
0020	0016	31907	896	2563	14461	0065	00006	2368
0030	-0044	32257	662	2594	14439	0088	00011	2076
0050	-0084	32836	606	2642	14432	0125	00026	1617
0075	-0084	33108	628	2664	14440	0163	00050	1407
0100	-0084	33309	582	2680	14447	0196	00080	1252
0125	-0080	3346 B	569	2692	14455	0226	00115	1139
0150	-0075	33575	572	2701	14463	0254	00153	1050
0175	-0073	33682	579	2710	14470	0279	00196	0968
0200	-0071	33782	582	2718	14476	0303	00241	0892
0225	-0065	3390 B	554 B	2727	14485	0324	00287	0806
0250	-0059	3400 C	524 C	2735	14493	0344	00334	0728
0300	-0045	34182	457	2749	14510	0377	00428	0596
0400	-0029	34276	457	2756	14536	0434	00631	0531
0500	-0025	34312	435	2758	14555	0486	00872	0505
0600	-0020	34332	416	2760	14574	0537	01157	0491

C-REF-NO 359	YR 1962	DEPTH 435	WAVES 1	X0	AIR T 04.4	VIS 9
CONS. NO 028	MONTH 8	MXSAMPD 04	WAVES 2	X0	WET B	STN 028
LAT 76-18 N	DAY 15	NO.DPTH 11	WND-DIR 270	WW-CODE 03		
LON 87-00 W	HR 11.0	W-COLOR	WND-SPD 01	CLD-TPE 6		
MARSD SQ 261	C/I 1810	W-TRNSP	BARO 1013.	CLD-AMT 9	HW	

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
110	0000	0410	28660		2277	14588
110	0010	0211	31432		2513	14540
110	0020	-0002	32060		2576	14454
110	0030	-0034	32312		2598	14445
110	0050	-0075	32757		2635	14435
110	0075	-0076	33213		2672	14445
110	0100	-0065	33440		2690	14458
110	0150	-0072	33706		2712	14466
110	0200	-0073	33857		2724	14476
110	0300	-0038	34222		2752	14514
110	0400	-0028	34294		2757	14536

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0410	28660		2277	14588	0000	00000	5093
0010	0211	31432		2513	14540	0040	00001	2840
0020	-0002	32060		2576	14454	0065	00005	2243
0030	-0034	32312		2598	14445	0087	00011	2037
0050	-0075	32757		2635	14435	0124	00026	1680
0075	-0076	33213		2672	14445	0162	00049	1330
0100	-0065	33440		2690	14458	0194	00077	1159
0125	-0066	3360 B		2702	14463	0221	00109	1039
0150	-0072	33706		2712	14466	0246	00144	0951
0175	-0074	3379 B		2718	14471	0270	00183	0888
0200	-0073	33857		2724	14476	0291	00225	0834
0225	-0065	3396 C		2732	14485	0311	00268	0759
0250	-0057 B	3405 D		2739	14495	0330	00313	0690
0300	-0038	34222		2752	14514	0361	00402	0570
0400	-0028	34294		2757	14536	0416	00598	0518

C-REF-NO 359	YR 1962	DEPTH 181	WAVES 1 29X3	AIR T 07.2	VIS 8
CONS. NO 029	MONTH 8	MXSAMPD 01	WAVES 2 X0	WET B	STN 029
LAT 76-23 N	DAY 15	NO.DPTH 8	WND-DIR 290	WW-CODE	
LON 89-22 W	HR 15.6	W-COLOR	WND-SPD 09	CLD-TPE 7	
MARSD SQ 261	C/I 1810	W-TRNSP	BARO 1016.	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
156	0000	-0003	30920	940	2484	14435
156	0010	-0097	31037	879	2497	14394
156	0020	-0099	31412	868	2527	14400
156	0030	-0106	31587	846	2541	14401
156	0050	-0084	31954	812	2570	14420
156	0075	-0067	33224	697	2672	14450
156	0100	-0065	33366	675	2684	14457
156	0150	-0060	33856	639	2723	14474

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	-0003	30920	940	2484	14435	0000	00000	3117
0010	-0097	31037	879	2497	14394	0031	00002	2996
0020	-0099	31412	868	2527	14400	0059	00006	2707
0030	-0106	31587	846	2541	14401	0086	00013	2569
0050	-0084	31954	812	2570	14420	0135	00032	2293
0075	-0067	33224	697	2672	14450	0180	00060	1325
0100	-0065	33366	675	2684	14457	0212	00089	1216
0125	-0058	3395 I	627 B	2731	14472	0237	00117	0771
0150	-0060	33856	639	2723	14474	0258	00146	0842

C-REF-NO 359	YR 1962	DEPTH 348	WAVES 1 27X2	AIR T 01.7	VIS 8
CONS. NO 030	MONTH 8	MXSAMPD 03	WAVES 2 X0	WET B	STN 030
LAT 77-05 N	DAY 15	NO.DPTH 11	WND-DIR 270	WW-CODE	
LON 89-38 W	HR 20.4	W-COLOR	WND-SPD 08	CLD-TPE 6	
MARSD SQ 261	C/I 1810	W-TRNSP	BARO 1018.	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
204	0000	0084	25200		2022	14397
204	0010	-0023	30475		2449	14421
204	0020	-0088	31222		2512	14403
204	0030	-0119	31528		2537	14394
204	0050	-0128	32617		2625	14408
204	0075	-0071	33421		2688	14451
204	0100	-0062	33894		2726	14466
204	0150	-0018	34410		2766	14501
204	0200	0009	34661		2785	14525
204	0250	0018	34733		2790	14539
204	0300	0020	34754		2792	14548

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0084	25200		2022	14397	0000	00000	7538
0010	-0023	30475		2449	14421	0055	00002	3450
0020	-0088	31222		2512	14403	0087	00006	2856
0030	-0119	31528		2537	14394	0114	00013	2611
0050	-0128	32617		2625	14408	0158	00031	1771
0075	-0071	33421		2688	14451	0195	00053	1173
0100	-0062	33894		2726	14465	0221	00075	0814
0125	-0041	3420 C		2750	14484	0238	00095	0585
0150	-0018	34410		2766	14501	0251	00113	0439
0175	-0002	34563		2778	14515	0261	00129	0331
0200	0009	34661		2785	14525	0268	00144	0262
0225	0015	3471 B		2789	14533	0274	00157	0228
0250	0018	34733		2790	14539	0280	00171	0213
0300	0020	34754		2792	14548	0290	00200	0198

C-REF-NO 359	YR 1962	DEPTH 658	WAVES 1 28X3	AIR T 02.8	VIS 9
CONS. NO 031	MONTH 8	MXSAMPD 06	WAVES 2 X0	WET B	STN 031
LAT 80-25 N	DAY 22	NO.DPTH 13	WND-DIR 280	WW-CODE	
LON 85-00 W	HR 16.4	W-COLOR	WND-SPD 07	CLD-TPE 2	
MARSD SQ 909	C/I 1810	W-TRNSP	BARO 1013.	CLD-AMT 2	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
164	0000	0320	15710	940	1257	14378
164	0010	0171	30863	891	2471	14515
164	0020	-0090	31185	991	2509	14401
164	0030	-0141	31186	948	2510	14379
164	0050	-0137	32167	846	2589	14398
164	0075	-0126	33358	593	2685	14424
164	0100	-0090	33915	583	2729	14453
164	0150	-0055	34262	605	2756	14482
164	0200	-0013	34582	616	2780	14514
164	0300	0020	34786	616	2794	14549
164	0400	0024	34834	616	2798	14568
164	0500	0024	34862	627	2800	14585
164	0600	0024	34874	627	2801	14602

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0320	15710	940	1257	14378	0000	00000	14945
0010	0171	30863	891	2471	14515	0091	00002	3246
0020	-0090	31185	991	2509	14401	0122	00006	2883
0030	-0141	31186	948	2510	14379	0151	00014	2870
0050	-0137	32167	846	2589	14398	0201	00033	2114
0075	-0126	33358	593	2685	14424	0243	00059	1202
0100	-0090	33915	583	2729	14453	0268	00080	0787
0125	-0070	3415 I	591	2748	14470	0285	00101	0611
0150	-0055	34262	605	2756	14482	0300	00121	0535
0175	-0033	34433	612	2769	14499	0312	00141	0414
0200	-0013	34582	616	2780	14514	0321	00158	0311
0225	-0000	3467 C	617	2786	14525	0328	00173	0252
0250	0010	3473 E	618	2790	14535	0334	00188	0210
0300	0020	34786	616	2794	14549	0343	00215	0174
0400	0024	34834	616	2798	14568	0359	00271	0140
0500	0024	34862	627	2800	14585	0372	00331	0120
0600	0024	34874	627	2801	14602	0384	00397	0111

C-REF-NO 359	YR 1962	DEPTH 300	WAVES 1 19X2	AIR T 04.4	VIS 8
CONS. NO 032	MONTH 8	MXSAMPD 03	WAVES 2 X0	WET B	STN 032
LAT 81-00 N	DAY 23	NO.DPTH 12	WND-DIR 190	WW-CODE	
LON 79-00 W	HR 17.1	W-COLOR	WND-SPD 06	CLD-TPE 3	
MARSD SQ 908	C/I 1810	W-TRNSP	BARO 1006.	CLD-AMT 3	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
171	0000	0418	15130	904	1206	14414
171	0010	0040	30020		2410	14444
171	0020	-0081	30692	959	2469	14399
171	0030	-0102	30849	948	2482	14393
171	0035	-0045	31528	944	2535	14430
171	0045	-0061	31879	944	2564	14429
171	0070	-0126	33091	560	2664	14419
171	0095	-0094	33813	537	2721	14449
171	0145	-0065	34112	537	2744	14475
171	0195	-0042	34322	526	2760	14496
171	0245	-0038	34357	503	2763	14507
171	0275	-0037	34362	503	2763	14513

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0418	15130	904	1206	14414	0000	00000	15436
0010	0040	30020	937	2410	14444	0096	00002	3822
0020	-0081	30692	959	2469	14399	0132	00007	3265
0030	-0102	30849	948	2482	14393	0164	00015	3137
0050	-0076 B	3212 G	875 E	2584	14426	0217	00036	2166
0075	-0123 B	33270	540 B	2678	14424	0261	00063	1270
0100	-0090	3388 E	536	2726	14452	0287	00085	0814
0125	-0073	3409 I	534	2743	14467	0305	00107	0659
0150	-0062	34139	536	2746	14477	0322	00129	0625
0175	-0050	34254	532	2755	14489	0336	00154	0543
0200	-0041	34330	523	2761	14498	0349	00179	0488
0225	-0038	3436 B	511	2763	14504	0361	00205	0469
0250	-0036	3437 B	507	2764	14509	0373	00233	0456

C-REF-NO 359	YR 1962	DEPTH 369	WAVES 1 22X2	AIR T 05.6	VIS B
CONS. NO 033	MONTH 8	MXSAMPD 03	WAVES 2 X0	WET B	STN 033
LAT 80-42 N	DAY 23	NO.DPTH 12	WND-DIR 210	WW-CODE	
LON 80-00 W	HR 20.5	W-COLOR	WND-SPD 04	CLD-TPE 3	
MARSD SQ 909	C/I 1810	W-TRNSP	BARO 1006.	CLD-AMT 3	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
205	0000	0290	20110		1608	14422
205	0010	0068	30633		2458	14465
205	0020	-0081	31216		2511	14406
205	0030	-0117	31220		2512	14391
205	0050	-0130	32061		2580	14400
205	0075	-0134	32920		2650	14414
205	0100	-0114	33572		2702	14437
205	0150	-0063	34123		2745	14477
205	0200	-0031	34446		2770	14504
205	0250	-0001	34656		2785	14529
205	0300	0014	34769		2793	14546
205	0350	0022	34640		2782	14556

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0290	20110		1608	14422	0000	00000	11536
0010	0068	30633		2458	14465	0075	00002	3366
0020	-0081	31216		2511	14406	0106	00006	2862
0030	-0117	31220		2512	14391	0135	00014	2849
0050	-0130	32061		2580	14400	0185	00034	2198
0075	-0134	32920		2650	14414	0232	00063	1535
0100	-0114	33572		2702	14437	0265	00091	1040
0125	-0088	3393 H		2730	14458	0288	00117	0779
0150	-0063	34123		2745	14476	0306	00142	0637
0175	-0046	34306		2759	14491	0320	00166	0505
0200	-0031	34446		2770	14504	0331	00188	0405
0225	-0015	34564		2778	14517	0341	00208	0323
0250	-0001	34656		2785	14529	0348	00226	0260
0300	0014	34769		2793	14546	0359	00257	0183

C-REF-NO 359	YR 1962	DEPTH 786	WAVES 1	XO	AIR T 00.6	VIS 8
CONS. NO 034	MONTH 8	MXSAMPD 07	WAVES 2	XO	WET B	STN 034
LAT 81-13 N	DAY 24	NO.DPTH 14	WND-DIR 330	WW-CODE		
LON 91-15 W	HR 08.1	W-COLOR	WND-SPD 04	CLD-TPE 3		
MARSD SQ 910	C/I 1810	W-TRNSP	BARO 1008.	CLD-AMT 1	HW	

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
081	0000	-0028	16370	938	1314	14225
081	0010	-0144	30493	948	2454	14365
081	0020	-0158	30941	938	2490	14366
081	0030	-0166	31073	904	2501	14366
081	0050	-0146	32136	788	2587	14393
081	0075	-0137	33251	616	2677	14417
081	0100	-0092	33905	606	2728	14452
081	0150	-0042	34360	627	2763	14490
081	0200	-0009	34580	616	2779	14516
081	0300	0026	34809	606	2796	14552
081	0400	0027	34844	593	2799	14569
081	0500	0028	34870	616	2801	14587
081	0600	0025	34874	627	2801	14602
081	0700	0023	34884	627	2802	14618

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	-0028	16370	938	1314	14225	0000	00000	14384
0010	-0144	30493	948	2454	14365	0089	00002	3405
0020	-0158	30941	938	2490	14366	0121	00007	3056
0030	-0166	31073	904	2501	14365	0152	00014	2952
0050	-0146	32136	788	2587	14393	0203	00034	2136
0075	-0137	33251	616	2677	14417	0246	00061	1281
0100	-0092	33905	606	2728	14452	0272	00083	0794
0125	-0063	3422 I	615	2753	14474	0289	00103	0565
0150	-0042	34360	627	2763	14490	0302	00121	0466
0175	-0024	3449 B	623	2773	14504	0313	00138	0376
0200	-0009	34580	616	2779	14516	0321	00155	0314
0225	0003	34660	613	2785	14527	0329	00171	0260
0250	0013	34724	610	2790	14536	0335	00185	0217
0300	0026	34809	606	2796	14552	0344	00212	0160
0400	0027	34844	593	2799	14569	0359	00265	0135
0500	0028	34870	616	2801	14587	0372	00323	0116
0600	0025	34874	627	2801	14602	0383	00388	0112
0700	0023	34884	627	2802	14618	0394	00461	0103

C-REF-NO 359 YR 1962 DEPTH 713 WAVES 1 04X0 AIR T 00.0 VIS 9
 CONS. NO 035 MONTH 8 MXSAMPD 07 WAVES 2 X0 WET B STN 035
 LAT 81-10 N DAY 24 NO.DPTH 14 WND-DIR 040 WW-CODE
 LON 90-37 W HR 10.6 W-COLOR WND-SPD 03 CLD-TPE
 MARSD SQ 910 C/I 1810 W-TRNSP BARO 1010. CLD-AMT 0 HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
106	0000	-0060	25060		2014	14327
106	0010	-0076	30638		2464	14399
106	0020	-0118	30915		2487	14384
106	0030	-0157	31071		2501	14370
106	0050	-0144	32742		2636	14403
106	0075	-0127	33354		2685	14423
106	0100	-0102	33796		2720	14446
106	0150	-0060	34221		2753	14479
106	0200	-0015	34563		2778	14513
106	0300	0023	34797		2795	14550
106	0400	0026	34852		2799	14569
106	0500	0027	34865		2800	14586
106	0600	0024	34877		2801	14602
106	0700	0024	34879		2802	14618

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	-0060	25060		2014	14327	0000	00000	7613
0010	-0076	30638		2464	14399	0055	00002	3308
0020	-0118	30915		2487	14384	0087	00007	3084
0030	-0157	31071		2501	14370	0117	00014	2955
0050	-0144	32742		2636	14403	0164	00032	1671
0075	-0127	33354		2685	14423	0200	00055	1205
0100	-0102	33796		2720	14445	0226	00077	0873
0125	-0081	3405 F		2740	14463	0246	00100	0685
0150	-0060	34221		2753	14479	0262	00122	0564
0175	-0037	34407		2767	14497	0274	00143	0432
0200	-0015	34563		2778	14513	0284	00161	0324
0225	-0001	3466 C		2785	14525	0291	00177	0259
0250	0011	3473 D		2790	14535	0297	00191	0212
0300	0023	34797		2795	14550	0307	00218	0168
0400	0026	34852		2799	14569	0322	00271	0128
0500	0027	34865		2800	14586	0334	00328	0119
0600	0024	34877		2801	14602	0346	00393	0109
0700	0024	34879		2802	14618	0357	00467	0108

C-REF-NO 359	YR 1962	DEPTH 701	WAVES 1 32XX	AIR T -01.1	VIS 9
CONS. NO 036	MONTH 8	MXSAMPD 06	WAVES 2 XX	WET B	STN 036
LAT 81-06 N	DAY 24	NO.DPTH 13	WND-DIR 320	WW-CODE	
LON 91-30 W	HR 12.9	W-COLOR	WND-SPD 04	CLD-TPE 1	
MARSD SQ 910	C/I 1810	W-TRNSP	BARO 1010.	CLD-AMT 1	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
129	0000	-0060	14420		1157	14184
129	0010	-0106	30349		2441	14381
129	0020	-0149	30991		2494	14371
129	0030	-0160	31152		2508	14369
129	0050	-0146	32884		2647	14404
129	0075	-0122	33554		2701	14429
129	0100	-0088	33924		2730	14454
129	0150	-0049	34317		2760	14486
129	0200	-0014	34556		2778	14513
129	0300	0026	34807		2796	14552
129	0400	0028	34848		2799	14570
129	0500	0028	34867		2800	14587
129	0600	0026	34877		2801	14602

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	-0060	14420		1157	14184	0000	00000	15924
0010	-0106	30349		2441	14381	0097	00002	3523
0020	-0149	30991		2494	14371	0130	00007	3019
0030	-0160	31152		2508	14369	0160	00014	2892
0050	-0146	32884		2647	14404	0205	00031	1562
0075	-0122	33554		2701	14429	0237	00052	1053
0100	-0088	33924		2730	14454	0261	00072	0781
0125	-0066	3416 C		2748	14472	0278	00092	0609
0150	-0049	34317		2760	14486	0292	00111	0495
0175	-0031	34451		2770	14500	0303	00130	0402
0200	-0014	34556		2778	14513	0313	00148	0330
0225	-0000	34643		2784	14525	0320	00164	0271
0250	0011	34714		2789	14535	0326	00179	0224
0300	0026	34807		2796	14552	0336	00206	0162
0400	0028	34848		2799	14570	0351	00259	0132
0500	0028	34867		2800	14587	0364	00317	0119
0600	0026	34877		2801	14603	0375	00383	0110

C-REF-NO 359	YR 1962	DEPTH 732	WAVES 1	XO	AIR T 00.6	VIS 9
CONS. NO 037	MONTH 8	MXSAMPD 07	WAVES 2	XO	WET B	STN 037
LAT 80-36 N	DAY 24	NO.DPTH 13	WND-DIR 320	WW-CODE		
LON 88-50 W	HR 19.2	W-COLOR	WND-SPD 04	CLD-TPE 3		
MARSD SQ 909	C/I 1810	W-TRNSP	BARO 1012.	CLD-AMT 1	HW	

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
192	0000	0310	18780		1501	14414
192	0010	-0012	28839		2317	14404
192	0020	-0098	30560		2458	14389
192	0030	-0130	31125		2505	14383
192	0050	-0152	32228		2594	14392
192	0075	-0130	33418		2690	14423
192	0100	-0093	33891		2727	14451
192	0150		34320			
192	0200	-0012	34576		2779	14515
192	0300	0026	34818		2797	14552
192	0500	0020	34572		2777	14579
192	0600	0020	34810		2796	14599
192	0700	0026				

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0310	18780		1501	14414	0000	00000	12569
0010	-0012	28839		2317	14404	0086	00002	4709
0020	-0098	30560		2458	14389	0127	00008	3362
0030	-0130	31125		2505	14383	0158	00016	2919
0050	-0152	32228		2594	14392	0209	00036	2064
0075	-0130	33418		2690	14423	0249	00060	1155
0100	-0093	33891		2727	14451	0274	00082	0804
0125	-0066 B	3416 E		2748	14472	0292	00102	0609
0150	-0043 B	34320		2760	14488	0306	00122	0496
0175	-0025	34464		2771	14503	0317	00140	0394
0200	-0012	34576		2779	14515	0326	00157	0316
0225	0001	34665		2786	14526	0333	00173	0255
0250	0011	34735		2791	14536	0339	00187	0208
0300	0026	34818		2797	14552	0348	00212	0153
0400	0029 C	3470 I		2787	14568	0368	00288	0248
0500	0020	34572		2777	14579	0398	00427	0336
0600	0020	34810		2796	14599	0423	00563	0157
0700	0026							

C-REF-NO 359	YR 1962	DEPTH 618	WAVES 1 34X0	AIR T 05.6	VIS 9
CONS. NO 038	MONTH 8	MXSAMPD 06	WAVES 2 X0	WET B	STN 038
LAT 80-10 N	DAY 24	NO.DPTH 13	WND-DIR 340	WW-CODE	
LON 87-03 W	HR 23.5	W-COLOR	WND-SPD 03	CLD-TPE 6	
MARSD SQ 909	C/I 1810	W-TRNSP	BARO 1012.	CLD-AMT 3	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
235	0000	0110	20310		1630	14343
235	0010	-0067	28517		2293	14373
235	0020	-0114	30035		2416	14374
235	0030	-0134	30749		2474	14376
235	0050	-0151	32058		2581	14390
235	0075	-0128	33415		2690	14424
235	0100	-0083	33986		2735	14457
235	0150	-0041	34349		2762	14490
235	0200	0000	34630		2783	14521
235	0300	0019	34784		2794	14548
235	0400	0026	34838		2798	14569
235	0500	0027	34866		2800	14586
235	0600	0025	34867		2801	14602

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0110	20310		1630	14343	0000	00000	11320
0010	-0067	28517		2293	14373	0081	00003	4942
0020	-0114	30035		2416	14374	0125	00009	3762
0030	-0134	30749		2474	14376	0160	00018	3207
0050	-0151	32058		2581	14390	0214	00039	2195
0075	-0128	33415		2690	14424	0257	00064	1158
0100	-0083	33986		2735	14457	0280	00085	0735
0125	-0058 B	3424 I		2754	14476	0297	00103	0553
0150	-0041	34349		2762	14490	0310	00122	0475
0175	-0019	34503		2774	14506	0320	00139	0368
0200	0000	34630		2783	14521	0328	00155	0281
0225	0009	3470 D		2788	14530	0335	00169	0234
0250	0015 B	3475 E		2791	14538	0340	00182	0201
0300	0019	34784		2794	14548	0350	00209	0175
0400	0026	34838		2798	14569	0366	00265	0139
0500	0027	34866		2800	14586	0379	00325	0119
0600	0025	34867		2801	14602	0391	00392	0117

C-REF-NO 359	YR 1962	DEPTH 227	WAVES 1 34X0	AIR T 02.8	VIS 9
CONS. NO 039	MONTH 8	MXSAMPD 02	WAVES 2 X0	WET B	STN 039
LAT 79-17 N	DAY 25	NO.DPTH 9	WND-DIR 330	WW-CODE	
LON 84-40 W	HR 06.9	W-COLOR	WND-SPD 04	CLD-TPE 6	
MARSD SQ 261	C/I 1810	W-TRNSP	BARO 1010.	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
069	0000	0168	24540		1966	14426
069	0010	0032	27410		2201	14404
069	0020	-0044	29102		2339	14394
069	0030	-0135	31054		2499	14380
069	0050	-0150	31626		2546	14384
069	0075	-0108	33467		2694	14434
069	0100	-0088	33811		2721	14452
069	0150	-0042	34375		2764	14490
069	0200	-0033	34370		2763	14502

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0168	24540		1966	14426	0000	00000	8077
0010	0032	27410		2201	14404	0070	00003	5821
0020	-0044	29102		2339	14394	0121	00011	4496
0030	-0135	31054		2499	14380	0159	00020	2972
0050	-0150	31626		2546	14384	0214	00042	2527
0075	-0108	33467		2694	14434	0260	00069	1124
0100	-0088	33811		2721	14452	0285	00091	0867
0125	-0063	3414 D		2746	14472	0304	00113	0626
0150	-0042	34375		2764	14490	0318	00131	0454
0175	-0039 B	3439 G		2766	14496	0329	00150	0442
0200	-0033	34370		2763	14502	0340	00172	0462

C-REF-NO 359	YR 1962	DEPTH 249	WAVES 1 30XX	AIR T 03.3	VIS 8
CONS. NO 040	MONTH 8	MXSAMPD 02	WAVES 2 X0	WET B	STN 040
LAT 78-09 N	DAY 25	NO.DPTH 9	WND-DIR	WW-CODE	
LON 88-08 W	HR 15.3	W-COLOR	WND-SPD 09	CLD-TPE 3	
MARSD SQ 261	C/I 1810	W-TRNSP	BARO 1011.	CLD-AMT 7	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
153	0000	0250	23760	835	1900	14453
153	0010	0107	28893	938	2317	14459
153	0020	-0086	31059	987	2498	14401
153	0030	-0122	31658	868	2548	14395
153	0050	-0132	32063	846	2581	14399
153	0075	-0114	33142	640	2667	14427
153	0100	-0092	33652	594	2708	14448
153	0150	-0026	34314	560	2759	14496
153	0200	-0002	34557	560	2777	14519

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0250	23760	835	1900	14453	0000	00000	8714
0010	0107	28893	938	2317	14459	0067	00002	4714
0020	-0086	31059	987	2498	14401	0106	00008	2981
0030	-0122	31658	868	2548	14395	0134	00015	2511
0050	-0132	32063	846	2581	14399	0181	00034	2196
0075	-0114	33142	640	2667	14427	0226	00061	1371
0100	-0092	33652	594	2708	14448	0256	00087	0987
0125	-0058 B	34039	570	2738	14473	0277	00112	0704
0150	-0026	34314	560	2759	14496	0292	00133	0509
0175	-0018 C	34495	550	2773	14507	0303	00151	0374
0200	-0002	34557	560	2777	14519	0312	00168	0335

C-REF-NO 359	YR 1962	DEPTH 379	WAVES 1 32X0	AIR T 00.6	VIS 8
CONS. NO 041	MONTH 8	MXSAMPD 03	WAVES 2 X0	WET B	STN 041
LAT 77-40 N	DAY 25	NO.DPTH 12	WND-DIR 320	WW-CODE	
LON 92-10 W	HR 20.2	W-COLOR	WND-SPD 04	CLD-TPE 3	
MARSD SQ 262	C/I 1810	W-TRNSP	BARO 1012.	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
202	0000	-0080	29400		2364	14378
202	0010	-0094	31170		2507	14398
202	0020	-0149	29424		2367	14349
202	0030	-0133	31411		2528	14386
202	0050	-0154	31020		2497	14374
202	0075	-0125	33005		2657	14419
202	0100	-0108	33598		2704	14440
202	0150	-0046	34332		2761	14487
202	0200	-0006	34600		2781	14518
202	0250	0017	34774		2794	14539
202	0300	0031	34808		2795	14554
202	0350	0032	34836		2798	14563

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	-0080	29400		2364	14378	0000	00000	4260
0010	-0094	31170		2507	14398	0036	00001	2895
0020	-0149	29424		2367	14349	0072	00007	4227
0030	-0133	31411		2528	14386	0107	00016	2698
0050	-0154	31020		2497	14374	0164	00040	2993
0075	-0125	33005		2657	14419	0220	00073	1473
0100	-0108	33598		2704	14440	0251	00101	1023
0125	-0078 B	3403 B		2738	14464	0273	00125	0701
0150	-0046	34332		2761	14487	0288	00146	0485
0175	-0024	3450 D		2774	14504	0299	00164	0367
0200	-0006	34600		2781	14518	0307	00180	0301
0225	0007	34702		2788	14529	0314	00194	0231
0250	0017	34774		2794	14539	0319	00207	0181
0300	0031	34808		2795	14554	0328	00231	0164

C-REF-NO 359	YR 1962	DEPTH 192	WAVES 1 29X0	AIR T -02.2	VIS 7
CONS. NO 042	MONTH 8	MXSAMPD 01	WAVES 2 X0	WET B	STN 042
LAT 77-15 N	DAY 26	NO.DPTH 8	WND-DIR 290	WW-CODE	
LON 97-14 W	HR 10.0	W-COLOR	WND-SPD 02	CLD-TPE 7	
MARSD SQ 262	C/I 1810	W-TRNSP	BARO 1011.	CLD-AMT 9	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
100	0000	-0028	28920		2324	14396
100	0010	-0018	28796		2314	14400
100	0020	-0088	31742		2553	14410
100	0030	-0097	32297		2599	14415
100	0050	-0099	32968		2653	14427
100	0075	-0083	33510		2696	14446
100	0100	-0071	33905		2728	14461
100	0150	-0034	34305		2758	14492

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	-0028	28920		2324	14396	0000	00000	4643
0010	-0018	28796		2314	14400	0047	00002	4740
0020	-0088	31742		2553	14410	0083	00007	2456
0030	-0097	32297		2599	14415	0106	00013	2027
0050	-0099	32968		2653	14427	0141	00027	1511
0075	-0083	33510		2696	14446	0174	00048	1100
0100	-0071	33905		2728	14461	0198	00069	0802
0125	-0052	34175		2749	14478	0216	00089	0603
0150	-0034	34305		2758	14492	0230	00108	0512

C-REF-NO 359	YR 1962	DEPTH 234	WAVES 1 29X0	AIR T -02.2	VIS 8
CONS. NO 043	MONTH 8	MXSAMPD 02	WAVES 2 X0	WET B	STN 043
LAT 76-57 N	DAY 26	NO.DPTH 9	WND-DIR 290	WW-CODE	
LON 97-44 W	HR 12.8	W-COLOR	WND-SPD 05	CLD-TPE 6	
MARSD SQ 262	C/I 1810	W-TRNSP	BARO 1011.	CLD-AMT 9	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
128	0000	-0030	29470		2369	14402
128	0010	-0025	30014		2412	14414
128	0020	-0086	31245		2513	14404
128	0030	-0119	32410		2608	14407
128	0050	-0102	33002		2656	14426
128	0075	-0092	33385		2686	14440
128	0100	-0079	33646		2707	14454
128	0150	-0056	33962		2732	14477
128	0200	-0010	34455		2769	14514

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	-0030	29470		2369	14402	0000	00000	4220
0010	-0025	30014		2412	14414	0040	00002	3803
0020	-0086	31245		2513	14404	0074	00007	2838
0030	-0119	32410		2608	14407	0098	00013	1934
0050	-0102	33002		2656	14426	0132	00026	1484
0075	-0092	33385		2686	14440	0166	00048	1192
0100	-0079	33646		2707	14454	0193	00072	0996
0125	-0069	3381 E		2720	14465	0217	00099	0874
0150	-0056	33962		2732	14477	0238	00128	0763
0175	-0032	3424 H		2753	14496	0254	00155	0559
0200	-0010	34455		2769	14514	0266	00179	0409

C-REF-NO 359	YR 1962	DEPTH 311	WAVES 1 29X2	AIR T -01.7	VIS 7
CONS. NO 044	MONTH 8	MXSAMPD 02	WAVES 2 X0	WET B	STN 044
LAT 76-53 N	DAY 26	NO.DPTH 10	WND-DIR 290	WW-CODE	
LON 98-24 W	HR 14.4	W-COLOR	WND-SPD 04	CLD-TPE 8	
MARSD SQ 262	C/I 1810	W-TRNSP	BARO 1011.	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
144	0000	-0070	29960	846	2409	14390
144	0010	-0010	30379	868	2441	14426
144	0020	-0060	31030	948	2495	14413
144	0030	-0109	31606	915	2543	14400
144	0050	-0140	32459	708	2613	14401
144	0075	-0106	32994	662	2655	14428
144	0100	-0101	33331	628	2682	14439
144	0150	-0042	34151	593	2746	14487
144	0200	-0014	34451	696	2769	14512
144	0250	0003	34609	582	2781	14530

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	-0070	29960	846	2409	14390	0000	00000	3832
0010	-0010	30379	868	2441	14426	0037	00002	3528
0020	-0060	31030	948	2495	14413	0070	00007	3011
0030	-0109	31606	915	2543	14400	0098	00014	2554
0050	-0140	32459	708	2613	14401	0143	00031	1889
0075	-0106	32994	662	2655	14428	0185	00058	1487
0100	-0101	33331	628	2682	14439	0219	00088	1229
0125	-0074 B	3376 G	599	2716	14462	0246	00119	0909
0150	-0042	34151	593	2746	14487	0266	00146	0625
0175	-0025	3434 D	649 C	2761	14501	0280	00169	0487
0200	-0014	34451	696	2769	14512	0291	00191	0410
0225	-0001	3460 G	614 E	2781	14524	0300	00210	0301
0250	0003	34609	582	2781	14530	0307	00228	0298

C-REF-NO 359	YR 1962	DEPTH 460	WAVES 1 20X1	AIR T -00.6	VIS 7
CONS. NO 045	MONTH 8	MXSAMPD 04	WAVES 2 X0	WET B	STN 045
LAT 76-48 N	DAY 26	NO.DPTH 13	WNO-DIR 300	WW-CODE	
LON 99-00 W	HR 15.9	W-COLOR	WNO-SPD 02	CLD-TPE 6	
MARSD SQ 262	C/I 1810	W-TRNSP	BARO 1011.	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
159	0000	-0069	29260		2353	14381
159	0010	-0074	29441		2367	14383
159	0020	-0078	29936		2407	14390
159	0030	-0120	31463		2532	14393
159	0050	-0147	32241		2595	14394
159	0075	-0126	32859		2645	14417
159	0100	-0102	33397		2688	14440
159	0150	-0050	34125		2744	14483
159	0200	-0024	34437		2768	14507
159	0250	0002	34591		2780	14530
159	0300	0010	34696		2788	14543
159	0400	0024	34770		2793	14567
159	0450	0025	34784		2794	14576

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	-0069	29260		2353	14381	0000	00000	4371
0010	-0074	29441		2367	14383	0043	00002	4229
0020	-0078	29936		2407	14390	0084	00008	3846
0030	-0120	31463		2532	14393	0116	00016	2661
0050	-0147	32241		2595	14394	0164	00035	2055
0075	-0126	32859		2645	14417	0210	00064	1584
0100	-0102	33397		2688	14440	0245	00094	1178
0125	-0075	33816		2721	14463	0270	00124	0867
0150	-0050	34125		2744	14483	0289	00150	0641
0175	-0035	3432 C		2759	14496	0304	00174	0501
0200	-0024	34437		2768	14507	0315	00196	0415
0225	-0010	34527		2775	14519	0325	00217	0354
0250	0002	34591		2780	14530	0333	00237	0311
0300	0010	34696		2788	14543	0347	00276	0236
0400	0024	34770		2793	14567	0369	00352	0189

C-REF-NO 359	YR 1962	DEPTH 194	WAVES 1	X0	AIR T 01.7	VIS 8
CONS. NO 046	MONTH 8	MXSAMPD 01	WAVES 2	X0	WET B	STN 046
LAT 75-25 N	DAY 27	NO.DPTH 8	WND-DIR 100	WW-CODE		
LON 92-46 W	HR 03.8	W-COLOR	WND-SPD 01	CLD-TPE 6		
MARSD SQ 262	C/I 1810	W-TRNSP	BARO 1009.	CLD-AMT 8	HW	

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
038	0000	0221	31770	824	2540	14548
038	0010	0207	31781	812	2542	14543
038	0020	0064	32409	925	2601	14489
038	0030	0007	32813	735	2636	14471
038	0050	-0056	32975	720	2652	14447
038	0075	-0097	33157	697	2668	14435
038	0100	-0102	33167	673	2669	14437
038	0150	-0139	33226	665	2675	14428

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0221	31770	824	2540	14548	0000	00000	2590
0010	0207	31781	812	2542	14543	0026	00001	2572
0020	0064	32409	925	2601	14489	0049	00005	2008
0030	0007	32813	735	2636	14471	0068	00009	1672
0050	-0056	32975	720	2652	14447	0100	00022	1521
0075	-0097	33157	697	2668	14435	0136	00045	1365
0100	-0102	33167	673	2669	14437	0170	00076	1354
0125	-0130 C	3325 F	667	2676	14429	0203	00114	1282
0150	-0139	33226	665	2675	14428	0236	00160	1294

C-REF-NO 359	YR 1962	DEPTH 252	WAVES 1 30X2	AIR T 00.6	VIS 8
CONS. NO 047	MONTH 8	MXSAMPD 02	WAVES 2 X0	WET B	STN 047
LAT 75-23 N	DAY 27	NO.DPTH 10	WND-DIR 300	WW-CODE	
LON 93-26 W	HR 05.6	W-COLOR	WND-SPD 02	CLD-TPE 6	
MARSD SQ 262	C/I 1810	W-TRNSP	BARO 1010.	CLD-AMT 7	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
056	0000	-0029	32010	835	2573	14438
056	0010	-0049	32058	862	2578	14431
056	0020	-0048	32155		2585	14435
056	0030	-0052	32355	947	2602	14437
056	0050	-0047	32764	857	2635	14448
056	0075	-0034	32956	776	2649	14461
056	0100	-0044	33028		2656	14462
056	0150	-0121	33166	640	2670	14436
056	0200	-0160	33258	594	2678	14427
056	0250	-0167	33280	503	2680	14432

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	-0029	32010	835	2573	14438	0000	00000	2272
0010	-0049	32058	862	2578	14431	0023	00001	2227
0020	-0048	32155	913 B	2585	14435	0045	00005	2153
0030	-0052	32355	947	2602	14437	0066	00010	1998
0050	-0047	32764	857	2635	14448	0103	00025	1685
0075	-0034	32956	776	2649	14461	0143	00051	1543
0100	-0044	33028	717	2656	14462	0181	00085	1483
0125	-0080 C	33100	672	2663	14450	0218	00127	1412
0150	-0121	33166	640	2670	14436	0253	00176	1346
0175	-0145	33219	618	2675	14430	0286	00231	1296
0200	-0160	33258	594	2678	14427	0318	00293	1260
0225	-0168	33274	541	2680	14428	0350	00362	1243
0250	-0167	33280	503	2680	14432	0381	00438	1238

C-REF-NO 359	YR 1962	DEPTH 132	WAVES 1 04X0	AIR T 01.1	VIS 7
CONS. NO 048	MONTH 8	MXSAMPD 01	WAVES 2 X0	WET B	STN 048
LAT 75-06 N	DAY 28	NO.DPTH 7	WND-DIR 040	WW-CODE	
LON 101-07 W	HR 13.0	W-COLOR	WND-SPD 06	CLD-TPE 7	
MARSD SQ 263	C/I 1810	W-TRNSP	BARO 1004.	CLD-AMT 9	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
130	0000	0010	30060		2415	14429
130	0010	0002	30244		2430	14430
130	0020	-0022	30720		2469	14427
130	0030	-0023	31096		2499	14433
130	0050	-0060	33103		2662	14447
130	0075	-0105	33109		2664	14430
130	0100	-0104	33428		2690	14439

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0010	30060		2415	14429	0000	00000	3780
0010	0002	30244		2430	14430	0037	00002	3636
0020	-0022	30720		2469	14427	0072	00007	3261
0030	-0023	31096		2499	14433	0103	00015	2972
0050	-0060	33103		2662	14447	0147	00032	1421
0075	-0105	33109		2664	14430	0183	00054	1399
0100	-0104	33428		2690	14439	0215	00083	1154

C-REF-NO 359	YR 1962	DEPTH 130	WAVES 1 02X2	AIR T 01.7	VIS 7
CONS. NO 049	MONTH 8	MXSAMPD 01	WAVES 2 X0	WET B	STN 049
LAT 75-04 N	DAY 28	NO.DPTH 7	WND-DIR 020	WW-CODE	
LON 102-15 W	HR 15.4	W-COLOR	WND-SPD 07	CLD-TPE 4	
MARSD SQ 263	C/I 1810	W-TRNSP	BARO 1005.	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
154	0000	0090	30790		2469	14476
154	0010	0081	30897		2479	14475
154	0020	-0094	32141		2586	14413
154	0030	-0133	32528		2618	14402
154	0050	-0118	32998		2656	14419
154	0075	-0107	33315		2681	14432
154	0100	-0106	33375		2686	14438

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0090	30790		2469	14476	0000	00000	3257
0010	0081	30897		2479	14475	0032	00002	3170
0020	-0094	32141		2586	14413	0059	00005	2148
0030	-0133	32528		2618	14402	0079	00011	1840
0050	-0118	32998		2656	14419	0113	00024	1482
0075	-0107	33315		2681	14432	0147	00046	1241
0100	-0106	33375		2686	14438	0178	00073	1194

C-REF-NO 359 YR 1962 DEPTH 137 WAVES 1 02X2 AIR T 01.7 VIS 7
 CONS. NO 050 MONTH 8 MXSAMPD 01 WAVES 2 X0 WET B STN 050
 LAT 75-03 N DAY 28 NO.DPTH 7 WND-DIR 360 WW-CODE
 LON 103-27 W HR 17.9 W-COLOR WND-SPD 06 CLD-TPE 7
 MARSD SQ 263 C/I 1810 W-TRNSP BARO 1005. CLD-AMT 7 HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
179	0000	-0110	29890		2404	14371
179	0010	0010	30598		2458	14438
179	0020	0098	31267		2507	14489
179	0030	-0049	31964		2570	14433
179	0050	-0124	32408		2608	14407
179	0075	-0133	32923		2650	14415
179	0100	-0106	33451		2692	14439

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	-0110	29890		2404	14371	0000	00000	3877
0010	0010	30598		2458	14438	0036	00002	3368
0020	0098	31267		2507	14489	0068	00006	2897
0030	-0049	31964		2570	14433	0094	00013	2298
0050	-0124	32408		2608	14407	0137	00030	1933
0075	-0133	32923		2650	14415	0180	00057	1533
0100	-0106	33451		2692	14439	0214	00087	1136

C-REF-NO 359	YR 1962	DEPTH 366	WAVES 1 32X2	AIR T -00.6	VIS 8
CONS. NO 051	MONTH 8	MXSAMPD 03	WAVES 2 X0	WET 8	STN 051
LAT 75-39 N	DAY 30	NO.DPTH 9	WND-DIR 320	WW-CODE 85	
LON 121-00 W	HR 07.4	W-COLOR	WND-SPD 08	CLD-TPE 6	
MARSD SQ 265	C/I 1810	W-TRNSP	BARO 1007.	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
074	0000	-0030	25950		2085	14354
074	0010	-0040				
074	0020	0036	30673		2463	14453
074	0030	-0123	31470		2532	14391
074	0050	-0153	31972		2574	14388
074	0075	-0164	32237		2595	14390
074	0200	-0041	34327		2760	14498
074	0300	-0001	34644		2784	14537
074	0350	0013	34730		2790	14553

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	-0030	25950		2085	14354	0000	00000	6930
0010	-0040	2856 I		2296	14387	0059	00003	4914
0020	0036	30673		2463	14453	0101	00008	3320
0030	-0123	31470		2532	14391	0131	00016	2655
0050	-0153	31972		2574	14388	0180	00036	2261
0075	-0164	32237		2595	14390	0235	00070	2052
0100	-0148 E	3268 I		2631	14408	0282	00112	1714
0125	-0128 H	3311 I		2665	14428	0321	00157	1389
*0150	-0103 H	3353 I		2698	14449	0352	00200	1076
*0175	-0074 E	3393 I		2730	14473	0375	00239	0776
0200	-0041	34327		2760	14498	0391	00269	0490
0225	-0028	3447 H		2771	14510	0402	00293	0386
0250	-0017	3457 I		2779	14521	0411	00314	0315
0300	-0001	34644		2784	14537	0426	00356	0269

C-REF-NO 359	YR 1962	DEPTH 433	WAVES 1	XO	AIR T -00.6	VIS 8
CONS. NO 052	MONTH 8	MXSAMPD 04	WAVES 2	XO	WET B	STN 052
LAT 75-17 N	DAY 30	NO.DPTH 10	WND-DIR 320		WW-CODE	
LON 121-00 W	HR 10.9	W-COLOR	WND-SPD 05		CLD-TPE 7	
MARSD SQ 265	C/I 1810	W-TRNSP	BARO 1007.		CLD-AMT 9	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
109	0000	-0099	25200		2026	14311
109	0010	-0099	30093		2421	14380
109	0020	-0133	31458		2532	14385
109	0030	-0120	31722		2553	14396
109	0050	-0160	32033		2579	14385
109	0075	-0169	32232		2595	14388
109	0100	-0142	32495		2616	14408
109	0150	-0107	33569		2702	14448
109	0200	-0048	34289		2758	14494
109	0400	0008	34730		2790	14559

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	-0099	25200		2026	14311	0000	00000	7501
0010	-0099	30093		2421	14380	0056	00002	3722
0020	-0133	31458		2532	14385	0088	00007	2663
0030	-0120	31722		2553	14396	0114	00013	2462
0050	-0160	32033		2579	14385	0161	00032	2212
0075	-0169	32232		2595	14388	0215	00066	2055
0100	-0142	32495		2616	14408	0264	00110	1857
0125	-0124	3301 I		2657	14428	0306	00158	1467
0150	-0107	33569		2702	14448	0338	00202	1043
0175	-0078	33966		2733	14472	0360	00239	0749
0200	-0048	34289		2758	14494	0376	00269	0516
0225	-0047 E	3461 G		2784	14503	0386	00290	0269
0250	-0033 E	3483 G		2801	14517	0391	00302	0108
*0300	-0012 E	3507 F		2819	14538	0392	00304	0061
0400	0008	34730		2790	14559	0400	00338	0209

C-REF-NO 359	YR 1962	DEPTH 496	WAVES 1	X0	AIR T -02.2	VIS 8
CONS. NO 053	MONTH 8	MXSAMPD 05	WAVES 2	X0	WET B	STN 053
LAT 74-55 N	DAY 30	NO.DPTH 12	WND-DIR 320		WW-CODE	
LON 121-00 W	HR 14.7	W-COLOR	WND-SPD 01		CLD-TPE 7	
MARSD SQ 265	C/I 1810	W-TRNSP	BARO 1007.		CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
147	0000	-0110	25340		2037	14308
147	0010	-0073				
147	0020	-0064	30949		2489	14410
147	0030	-0106	31739		2554	14403
147	0050	-0146	31998		2576	14391
147	0075	-0160	32221		2594	14392
147	0100	-0137	32622		2626	14413
147	0150	-0124	33420		2690	14438
147	0200	-0062	34192		2750	14486
147	0300	0012				
147	0400	0032	34717		2788	14570
147	0500	0036	34840		2798	14590

DEPTH OF BOTTOM OBSERVATION GREATER THAN SOUNDING

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	-0110	25340		2037	14308	0000	00000	7392
0010	-0073	2846 I		2288	14370	0062	00003	4988
0020	-0064	30949		2489	14410	0103	00008	3072
0030	-0106	31739		2554	14403	0130	00015	2453
0050	-0146	31998		2576	14391	0178	00034	2242
0075	-0160	32221		2594	14392	0232	00069	2065
0100	-0137	32622		2626	14413	0280	00112	1761
0125	-0131 B	33023		2658	14425	0320	00158	1454
0150	-0124	33420		2690	14438	0353	00204	1151
0175	-0095 B	3382 C		2722	14462	0378	00245	0851
0200	-0062	34192		2750	14486	0397	00280	0583
0225	-0038	3438 I		2765	14504	0410	00308	0451
0250	-0017	3453 I		2776	14520	0420	00332	0345
0300	0012	3473 I		2791	14544	0434	00371	0209
0400	0032	34717		2788	14570	0456	00452	0234
0500	0036	34840		2798	14590	0475	00538	0144

C-REF-NO 359	YR 1962	DEPTH 497	WAVES 1 X0	AIR T -02.2	VIS 8
CONS. NO 054	MONTH 8	MXSAMPD 04	WAVES 2 X0	WET B	STN 054
LAT 74-36 N	DAY 30	NO.DPTH 12	WND-DIR 320	WW-CODE	
LON 121-00 W	HR 17.9	W-COLOR	WND-SPD 05	CLD-TPE 7	
MARSD SQ 265	C/I 1810	W-TRNSP	BARO 1007.	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
179	0000	0010	27410		2202	14393
179	0010	0016	28041		2252	14406
179	0020	-0106	30734		2473	14388
179	0030	-0110	31333		2521	14396
179	0050	-0140	31813		2561	14392
179	0075	-0156	32190		2591	14393
179	0100	-0136	32680		2631	14414
179	0150	-0125	33405		2689	14437
179	0200	-0067	34157		2748	14483
179	0300	0010	34699		2788	14543
179	0400	0034	34828		2797	14572
179	0450	0034	34847		2798	14581

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0010	27410		2202	14393	0000	00000	5815
0010	0016	28041		2252	14406	0056	00003	5331
0020	-0106	30734		2473	14388	0099	00009	3226
0030	-0110	31333		2521	14396	0129	00016	2764
0050	-0140	31813		2561	14392	0181	00037	2386
0075	-0156	32190		2591	14393	0237	00073	2090
0100	-0136	32680		2631	14414	0285	00115	1717
0125	-0131 B	3306 D		2661	14426	0325	00160	1424
0150	-0125	33405		2689	14437	0357	00206	1162
0175	-0098	3380 D		2720	14460	0383	00248	0869
0200	-0067	34157		2748	14483	0401	00283	0608
0225	-0043	3437 G		2764	14502	0415	00312	0455
0250	-0022	3453 I		2776	14518	0425	00337	0342
0300	0010	34699		2788	14543	0439	00377	0234
0400	0034	34828		2797	14572	0459	00445	0151

C-REF-NO 359	YR 1962	DEPTH 256	WAVES 1	XO	AIR T 00.0	VIS 8
CONS. NO 055	MONTH 8	MXSAMPD 02	WAVES 2	XO	WET B	STN 055
LAT 75-22 N	DAY 31	NO.DPTH 10	WND-DIR		WW-CODE	
LON 118-05 W	HR 00.9	W-COLOR	WND-SPD		CLD-TPE 6	
MARSD SQ 264	C/I 1810	W-TRNSP	BARO 1005.		CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
009	0000	0090	26130	868	2096	14412
009	0010	0173	28477	857	2280	14483
009	0020	0016	30955	938	2486	14447
009	0030	-0103	31531	915	2537	14402
009	0050	-0158	31961	904	2573	14385
009	0075	-0150	32335	765	2603	14398
009	0100	-0138	32800	674	2640	14415
009	0150	-0123	33615	582	2706	14441
009	0200	-0060	34275	492	2757	14488
009	0250	-0044	34324		2760	14505

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0090	26130	868	2096	14412	0000	00000	6825
0010	0173	28477	857	2280	14483	0060	00003	5066
0020	0016	30955	938	2486	14447	0101	00008	3096
0030	-0103	31531	915	2537	14402	0129	00016	2613
0050	-0158	31961	904	2573	14385	0178	00035	2268
0075	-0150	32335	765	2603	14398	0232	00069	1980
0100	-0138	32800	674	2640	14415	0277	00109	1625
0125	-0133 B	33227	620	2675	14427	0314	00151	1297
0150	-0123	33615	582	2706	14441	0343	00192	1002
0175	-0092 B	3399 E	522 B	2735	14466	0365	00227	0723
0200	-0060	34275	492	2757	14488	0380	00257	0521
0225	-0060 C	3431 H		2760	14493	0393	00285	0494
0250	-0044	34324		2760	14505	0406	00315	0490

C-REF-NO 359	YR 1962	DEPTH 483	WAVES 1 32X2	AIR T 00.0	VIS 9
CONS. NO 056	MONTH 8	MXSAMPD 04	WAVES 2 XO	WET B	STN 056
LAT 74-16 N	DAY 31	NO.DPTH 11	WND-DIR 320	WW-CODE	
LON 117-21 W	HR 07.2	W-COLOR	WND-SPD 05	CLD-TPE 6	
MARSD SQ 264	C/I 1810	W-TRNSP	BARO 1006.	CLD-AMT 7	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
072	0000	0070	27600		2215	14423
072	0010	0002	29576		2376	14420
072	0020	-0042	31241		2512	14425
072	0030	-0123	31637		2546	14394
072	0050	-0150	31966		2573	14389
072	0075	-0158	32236		2595	14393
072	0100	-0137	32698		2632	14414
072	0150	-0129	33398		2689	14436
072	0200	-0075	34072		2741	14478
072	0300	0010	34707		2788	14543
072	0400	0034	34839		2798	14572

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0070	27600		2215	14423	0000	00000	5689
0010	0002	29576		2376	14420	0049	00002	4148
0020	-0042	31241		2512	14425	0085	00007	2855
0030	-0123	31637		2546	14394	0112	00014	2527
0050	-0150	31966		2573	14389	0160	00034	2266
0075	-0158	32236		2595	14393	0214	00068	2054
0100	-0137	32698		2632	14414	0262	00110	1703
0125	-0133 B	3307 C		2662	14425	0301	00155	1419
0150	-0129	33398		2689	14435	0333	00200	1166
0175	-0104	3375 B		2716	14456	0359	00243	0903
0200	-0075	34072		2741	14478	0379	00281	0669
0225	-0049	3430 D		2758	14498	0394	00313	0507
0250	-0027	3448 E		2772	14515	0405	00340	0380
0300	0010	34707		2788	14543	0421	00383	0228
0400	0034	34839		2798	14572	0439	00448	0143

C-REF-NO 359	YR 1962	DEPTH 483	WAVES 1 04X0	AIR T 00.0	VIS 9
CONS. NO 057	MONTH 8	MXSAMPD 04	WAVES 2 X0	WET B	STN 057
LAT 74-28 N	DAY 31	NO.DPTH 12	WND-DIR 040	WW-CODE	
LON 115-58 W	HR 10.1	W-COLOR	WND-SPD 03	CLD-TPE 6	
MARSD SQ 264	C/I 1810	W-TRNSP	BARO 1006.	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
101	0000	0080	26540		2129	14413
101	0010	0083	26700		2142	14418
101	0020	-0042	31422		2526	14427
101	0030	-0118	31798		2559	14398
101	0050	-0151	32026		2578	14389
101	0075	-0155	32284		2599	14395
101	0100	-0138	32813		2641	14415
101	0150	-0092	33825		2722	14459
101	0200	-0032	34412		2767	14503
101	0300	0020	34764		2793	14548
101	0400	0033	34837		2798	14572
101	0450	0036	34848		2798	14582

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0080	26540		2129	14413	0000	00000	6507
0010	0083	26700		2142	14418	0065	00003	6384
0020	-0042	31422		2526	14427	0110	00009	2716
0030	-0118	31798		2559	14398	0136	00016	2404
0050	-0151	32026		2578	14389	0183	00035	2220
0075	-0155	32284		2599	14395	0236	00069	2018
0100	-0138	32813		2641	14415	0282	00109	1615
0125	-0117	3335 D		2684	14436	0317	00149	1208
0150	-0092	33825		2722	14459	0343	00185	0853
0175	-0061	3416 B		2748	14482	0362	00216	0607
0200	-0032	34412		2767	14503	0375	00241	0430
0225	-0013	3456 F		2778	14518	0384	00261	0324
0250	0002	3467 I		2786	14531	0391	00279	0249
0300	0020	34764		2793	14548	0402	00310	0191
0400	0033	34837		2798	14572	0419	00369	0144

C-REF-NO 359	YR 1962	DEPTH 358	WAVES 1	XO	AIR T 01.1	VIS 9
CONS. NO 058	MONTH 8	MXSAMPD 03	WAVES 2	XO	WET B	STN 058
LAT 74-39 N	DAY 31	NO.DPTH 11	WND-DIR		WW-CODE	
LON 114-36 W	HR 13.3	W-COLOR	WND-SPD		CLD-TPE 3	
MARSD SQ 264	C/I 1810	W-TRNSP	BARO 1008.		CLD-AMT 6	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
133	0000	-0003	26700		2145	14377
133	0010	0105	26260		2106	14422
133	0020	-0069	31572		2539	14417
133	0030	-0106	31872		2565	14405
133	0050	-0164	32074		2582	14384
133	0075	-0143	32498		2616	14404
133	0100	-0137	32960		2653	14417
133	0150	-0088	33909		2729	14462
133	0200	-0029	34436		2769	14505
133	0300	0016	34730		2790	14546
133	0350	0026	34791		2794	14560

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	-0003	26700		2145	14377	0000	00000	6358
0010	0105	26260		2106	14422	0066	00003	6730
0020	-0069	31572		2539	14417	0112	00010	2593
0030	-0106	31872		2565	14405	0137	00016	2351
0050	-0164	32074		2582	14384	0183	00034	2180
0075	-0143	32498		2616	14404	0234	00066	1857
0100	-0137	32960		2653	14417	0276	00104	1502
0125	-0116	3346 E		2693	14438	0309	00141	1125
0150	-0088	33909		2729	14462	0333	00175	0790
0175	-0058	3422 B		2752	14484	0350	00203	0569
0200	-0029	34436		2769	14505	0363	00227	0413
0225	-0012	3457 F		2778	14519	0372	00247	0322
0250	0002 B	3466 H		2785	14530	0379	00264	0258
0300	0016	34730		2790	14546	0391	00298	0214

C-REF-NO 359 YR 1962 DEPTH 91 WAVES 1 X0 AIR T 00.0 VIS 9
 CONS. NO 059 MONTH 8 MXSAMPD 01 WAVES 2 X0 WET B STN 059
 LAT 73-27 N DAY 31 NO.DPTH 6 WND-DIR 070 WW-CODE
 LON 114-53 W HR 19.8 W-COLOR WND-SPD 04 CLD-TPE 6
 MARSD SQ 264 C/I 1810 W-TRNSP BARO 1010. CLD-AMT 7 HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
198	0000	-0030				
198	0010	-0041	31168		2506	14422
198	0020	-0072	31588		2541	14415
198	0030	-0145	31949		2572	14388
198	0050	-0163	32106		2585	14385
198	0075	-0140	32587		2623	14407

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	-0030	3058 G		2458	14418	0000	00000	3365
0010	-0041	31168		2506	14422	0032	00002	2912
0020	-0072	31588		2541	14415	0059	00006	2579
0030	-0145	31949		2572	14388	0084	00012	2282
0050	-0163	32106		2585	14385	0128	00030	2155
0075	-0140	32587		2623	14407	0178	00061	1789

C-REF-NO 359	YR 1962	DEPTH 102	WAVES 1 35X0	AIR T -03.9	VIS 8
CONS. NO 060	MONTH 9	MXSAMPD 01	WAVES 2 X0	WET B	STN 060
LAT 74-56 N	DAY 01	NO.DPTH 7	WND-DIR 350	WW-CODE	
LON 105-50 W	HR 14.5	W-COLOR	WND-SPD 09	CLD-TPE 8	
MARSD SQ 263	C/I 1810	W-TRNSP	BARO 1015.	CLD-AMT 7	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
145	0000	-0120	28550		2296	14347
145	0010	-0040	28674		2305	14388
145	0020	-0070	30266		2434	14398
145	0030	-0104	31467		2532	14400
145	0050	-0145	32049		2580	14392
145	0075	-0139	32567		2622	14407
145	0100	-0128	32874		2646	14420

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	-0120	28550		2296	14347	0000	00000	4908
0010	-0040	28674		2305	14388	0049	00002	4828
0020	-0070	30266		2434	14398	0091	00009	3595
0030	-0104	31467		2532	14400	0123	00016	2662
0050	-0145	32049		2580	14392	0172	00036	2203
0075	-0139	32567		2622	14407	0222	00068	1805
0100	-0128	32874		2646	14420	0265	00105	1571

C-REF-NO 359	YR 1962	DEPTH 134	WAVES 1 X4	AIR T -03.3	VIS 8
CONS. NO 061	MONTH 9	MXSAMPD 01	WAVES 2 X0	WET B	STN 061
LAT 74-43 N	DAY 01	NO.DPTH 7	WND-DIR 360	WW-CODE	
LON 102-05 W	HR 21.1	W-COLOR	WND-SPD 13	CLD-TPE 6	
MARSD SQ 263	C/I 1810	W-TRNSP	BARO 1011.	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
211	0000	-0030	30580		2458	14418
211	0010	-0020	30593		2459	14424
211	0020	-0009	31561		2536	14444
211	0030	-0119	32019		2577	14401
211	0050	-0143	32580		2623	14401
211	0075	-0129	33039		2660	14418
211	0100	-0115	33412		2689	14434

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	-0030	30580		2458	14418	0000	00000	3368
0010	-0020	30593		2459	14424	0034	00002	3360
0020	-0009	31561		2536	14444	0064	00006	2622
0030	-0119	32019		2577	14401	0088	00012	2234
0050	-0143	32580		2623	14401	0129	00029	1796
0075	-0129	33039		2660	14418	0170	00054	1446
0100	-0115	33412		2689	14434	0203	00083	1163

C-REF-NO 359	YR 1962	DEPTH 443	WAVES 1 X4	AIR T 01.7	VIS 7
CONS. NO 062	MONTH 9	MXSAMPD 04	WAVES 2 X0	WET B	STN 062
LAT 71-56 N	DAY 03	NO.DPTH 11	WND-DIR	WW-CODE 72	
LDN 96-06 W	HR 13.4	W-COLOR	WND-SPD 14	CLD-TPE 7	
MARSD SQ 262	C/I 1810	W-TRNSP	BARO 1003.	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
134	0000	0060	26210		2104	14399
134	0010	0040	26190		2103	14391
134	0020	0120	27888		2236	14453
134	0030	-0065	30451		2449	14405
134	0050	-0131	31618		2545	14393
134	0075	-0134	31975		2574	14401
134	0100	-0140	32368		2606	14408
134	0150	-0123	32994		2656	14433
134	0200	-0113	33240		2675	14449
134	0300	-0107	33391		2687	14471
134	0400	-0106	33457		2693	14489

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0060	26210		2104	14399	0000	00000	6753
0010	0040	26190		2103	14391	0068	00003	6761
0020	0120	27888		2236	14453	0129	00013	5488
0030	-0065	30451		2449	14404	0174	00023	3453
0050	-0131	31618		2545	14393	0234	00047	2538
0075	-0134	31975		2574	14401	0295	00085	2261
0100	-0140	32368		2606	14408	0348	00132	1955
0125	-0133	3272 B		2634	14420	0394	00185	1687
0150	-0123	32994		2656	14433	0433	00241	1477
0175	-0117	3315 C		2668	14442	0469	00300	1360
0200	-0113	33240		2675	14449	0502	00364	1289
0225	-0110	3330 C		2680	14455	0534	00434	1240
0250	-0109	3335 D		2684	14461	0565	00509	1204
0300	-0107	33391		2687	14471	0625	00678	1170
0400	-0106	33457		2693	14488	0740	01091	1115

C-REF-NO 359	YR 1962	DEPTH 258	WAVES 1 06X2	AIR T 01.7	VIS 7
CONS. NO 063	MONTH 9	MXSAMPD 02	WAVES 2 82	WET B	STN 063
LAT 71-56 N	DAY 03	NO.DPTH 9	WND-DIR 060	WW-CODE 10	
LON 95-32 W	HR 15.6	W-COLOR	WND-SPD 08	CLD-TPE 7	
MARSD SQ 262	C/I 1810	W-TRNSP	BARO 1002.	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
156	0000	-0060	31220	846	2510	14413
156	0010	-0069	31191	835	2508	14410
156	0020	-0071	31231	824	2512	14411
156	0030	-0132	31991	801	2575	14395
156	0050	-0122	32154	755	2588	14405
156	0075	-0120	32476	685	2614	14414
156	0100	-0127	32757	583	2637	14419
156	0150	-0120	33048	594	2660	14435
156	0200	-0114	33211	572	2673	14448

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	-0060	31220	846	2510	14413	0000	00000	2867
0010	-0069	31191	835	2508	14410	0029	00001	2886
0020	-0071	31231	824	2512	14411	0058	00006	2854
0030	-0132	31991	801	2575	14395	0083	00012	2253
0050	-0122	32154	755	2588	14405	0128	00030	2128
0075	-0120	32476	685	2614	14414	0178	00062	1880
0100	-0127	32757	583	2637	14419	0223	00102	1661
0125	-0125	3293 C	573 C	2651	14427	0263	00148	1525
0150	-0120	33048	594	2660	14435	0300	00200	1437
0175	-0121	3318 D	547 D	2670	14440	0335	00259	1338
0200	-0114	33211	572	2673	14448	0368	00323	1311

C-REF-NO 359	YR 1962	DEPTH 225	WAVES 1	X0	AIR T 04.4	VIS 8
CONS. NO 064	MONTH 9	MXSAMPD 02	WAVES 2	X0	WET B	STN 064
LAT 71-20 N	DAY 03	NO.DPTH 9	WND-DIR		WW-CODE	
LON 97-00 W	HR 21.9	W-COLOR	WND-SPD 08		CLD-TPE 6	
MARSD SQ 262	C/I 1810	W-TRNSP	BARO 1004.		CLD-AMT 7	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
219	0000	-0010	29730		2389	14415
219	0010	-0081	30756		2474	14398
219	0020	-0088	31210		2511	14403
219	0030	-0100	31622		2544	14404
219	0050	-0126	31975		2573	14400
219	0075	-0137	32446		2612	14406
219	0100	-0123	32972		2654	14424
219	0150	-0113	33225		2674	14441
219	0200	-0108	33442		2691	14454

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	-0010	29730		2389	14415	0000	00000	4026
0010	-0081	30756		2474	14398	0036	00002	3216
0020	-0088	31210		2511	14403	0067	00006	2865
0030	-0100	31622		2544	14404	0094	00013	2544
0050	-0126	31975		2573	14400	0143	00033	2265
0075	-0137	32446		2612	14406	0195	00066	1898
0100	-0123	32972		2654	14424	0238	00103	1497
0125	-0116	3317 I		2670	14434	0274	00145	1348
0150	-0113	33225		2674	14441	0307	00192	1303
0175	-0107	3347 I		2693	14451	0337	00242	1119
0200	-0108	33442		2691	14454	0366	00297	1137

C-REF-NO 359	YR 1962	DEPTH 124	WAVES 1 29X4	AIR T 00.3	VIS 4
CONS. NO 065	MONTH 9	MXSAMPD 01	WAVES 2 X0	WET B	STN 065
LAT 71-04 N	DAY 05	NO.DPTH 7	WND-DIR 290	WW-CODE 11	
LON 99-00 W	HR 17.4	W-COLOR	WND-SPD 07	CLD-TPE 7	
MARSD SQ 262	C/I 1810	W-TRNSP	BARO 994.	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
174	0000	-0060	27220		2188	14357
174	0010	-0082	27986		2250	14359
174	0020	-0054	29257		2352	14391
174	0030	-0104	31530		2537	14401
174	0050	-0141	32088		2583	14395
174	0075	-0132	32721		2634	14412
174	0100	-0108	33531		2699	14439

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	-0060	27220		2188	14357	0000	00000	5944
0010	-0082	27986		2250	14359	0057	00003	5348
0020	-0054	29257		2352	14391	0105	00010	4375
0030	-0104	31530		2537	14401	0141	00019	2614
0050	-0141	32088		2583	14395	0189	00038	2174
0075	-0132	32721		2634	14412	0237	00068	1689
0100	-0108	33531		2699	14439	0272	00098	1074

C-REF-NO 359	YR 1962	DEPTH 143	WAVES 1 29X3	AIR T 00.6	VIS 7
CONS. NO 066	MONTH 9	MXSAMPD 01	WAVES 2 X0	WET B	STN 066
LAT 71-04 N	DAY 05	NO.DPTH 7	WND-DIR 290	WW-CODE 44	
LON 100-00 W	HR 20.1	W-COLOR	WND-SPD 07	CLD-TPE 7	
MAKSD SQ 263	C/I 1810	W-TRNSP	BARO 997.	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
201	0000	-0110	28520		2294	14352
201	0010	-0112	28454		2289	14351
201	0020	-0122	28585		2299	14350
201	0030	-0104	31547		2538	14401
201	0050	-0151	32174		2590	14391
201	0075	-0137	32504		2616	14407
201	0100	-0130	32919		2650	14420

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	-0110	28520		2294	14352	0000	00000	4933
0010	-0112	28454		2289	14351	0050	00003	4982
0020	-0122	28585		2299	14350	0099	00010	4878
0030	-0104	31547		2538	14401	0137	00019	2601
0050	-0151	32174		2590	14391	0184	00038	2106
0075	-0137	32504		2616	14407	0234	00070	1854
0100	-0130	32919		2650	14420	0277	00107	1536

C-REF-NO 359 YR 1962 DEPTH 124 WAVES 1 X0 AIR T 00.0 VIS 2
 CONS. NO 067 MONTH 9 MXSAMPD 01 WAVES 2 X0 WET B STN 067
 LAT 71-04 N DAY 05 NO.DPTH 7 WND-DIR 290 WW-CODE 41
 LON 100-52 W HR 22.7 W-COLOR WND-SPD 06 CLD-TPE
 MARSD SQ 263 C/I 1810 W-TRNSP BARO 999. CLD-AMT 9 HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
227	0000	-0120	27460		2208	14332
227	0010	-0130	28271		2274	14340
227	0020	-0111	29753		2393	14372
227	0030	-0110	31426		2529	14397
227	0050	-0125	32030		2578	14402
227	0075	-0137	32458		2613	14406
227	0100	-0133	32758		2637	14416

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	-0120	27460		2208	14332	0000	00000	5750
0010	-0130	28271		2274	14340	0055	00003	5121
0020	-0111	29753		2393	14371	0100	00009	3980
0030	-0110	31426		2529	14397	0134	00018	2692
0050	-0125	32030		2578	14402	0183	00037	2223
0075	-0137	32458		2613	14406	0235	00070	1889
0100	-0133	32758		2637	14416	0280	00110	1658

C-REF-NO 359	YR 1962	DEPTH 84	WAVES 1 32X0	AIR T 00.6	VIS 8
CONS. NO 068	MONTH 9	MXSAMPD 01	WAVES 2 X0	WET B	STN 068
LAT 71-43 N	DAY 06	NO.DPTH 6	WND-DIR 320	WW-CODE	
LON 100-51 W	HR 11.6	W-COLOR	WND-SPD 09	CLD-TPE 6	
MARSD SQ 263	C/I 1810	W-TRNSP	BARO 1005.	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
116	0000	0030	28540		2292	14417
116	0010	0001	29360		2359	14417
116	0020	-0040	30843		2479	14420
116	0030	-0085	31416		2527	14409
116	0050	-0143	32205		2592	14396
116	0075	-0124	32983		2655	14420

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0030	28540		2292	14417	0000	00000	4953
0010	0001	29360		2359	14417	0047	00002	4313
0020	-0040	30843		2479	14420	0084	00008	3161
0030	-0085	31416		2527	14409	0114	00015	2707
0050	-0143	32205		2592	14396	0162	00034	2084
0075	-0124	32983		2655	14420	0207	00062	1490

C-REF-NO 359	YR 1962	DEPTH 348	WAVES 1 27X1	AIR T 01.1	VIS 8
CONS. NO 069	MONTH 9	MXSAMPD 03	WAVES 2 X0	WET B	STN 069
LAT 72-58 N	DAY 06	NO.DPTH 11	WND-DIR 270	WW-CODE 02	
LON 102-54 W	HR 22.7	W-COLOR	WND-SPD 03	CLD-TPE 3	
MARSD SQ 263	C/I 1810	W-TRNSP	BARO 1006.	CLD-AMT 6	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
227	0000	-0050	26440	846	2125	14351
227	0010	-0048	26660	868	2143	14357
227	0020	-0023	31312	970	2517	14434
227	0030	-0076	31743	976	2553	14417
227	0050	-0147	32157	817	2589	14393
227	0075	-0139	32559	662	2621	14407
227	0100	-0130	32987	616	2655	14421
227	0150	-0099	33774	560	2718	14455
227	0200	-0057	34199	526	2751	14489
227	0300		34675	468		
227	0330	0010	34695	475	2788	14548

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	-0050	26440	846	2125	14351	0000	00000	6548
0010	-0048	26660	868	2143	14357	0065	00003	6377
0020	-0023	31312	970	2517	14434	0111	00009	2808
0030	-0076	31743	976	2553	14417	0137	00016	2458
0050	-0147	32157	817	2589	14393	0183	00035	2120
0075	-0139	32559	662	2621	14407	0233	00066	1811
0100	-0130	32987	616	2655	14421	0274	00102	1483
0125	-0116	3341 C	584	2689	14437	0308	00140	1163
0150	-0099	33774	560	2718	14455	0334	00176	0889
0175	-0078	3402 C	541	2737	14472	0354	00210	0711
0200	-0057	34199	526	2751	14489	0370	00241	0580
0225	-0047 B	34371	505	2764	14500	0383	00269	0453
0250	-0033 B	3451 B	488	2775	14512	0393	00294	0356
0300	-0005	34675	468	2787	14536	0408	00336	0243

C-REF-NO 359 YR 1962 DEPTH 124 WAVES 1 20X3 AIR T 01.1 VIS 8
 CONS. NO 070 MONTH 9 MXSAMPD 01 WAVES 2 XO WET B STN 070
 LAT 72-00 N DAY 08 NO.DPTH 8 WND-DIR 200 WW-CODE 03
 LON 93-40 W HR 15.7 W-COLOR WND-SPD 08 CLD-TPE 3
 MARSD SQ 262 C/I 1810 W-TRNSP BARO 1011. CLD-AMT 8 HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
157	0000	0170	30080		2408	14502
157	0010	0154	30060		2407	14496
157	0020	0132	30789		2467	14498
157	0030	-0076	31890		2565	14419
157	0050	-0143	32240		2595	14396
157	0075	-0160	32447		2612	14395
157	0100	-0167	32627		2627	14398
157	0120	-0175	32777		2639	14400

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0170	30080		2408	14502	0000	00000	3842
0010	0154	30060		2407	14496	0039	00002	3848
0020	0132	30789		2467	14498	0074	00007	3280
0030	-0076	31890		2565	14419	0103	00014	2346
0050	-0143	32240		2595	14396	0147	00032	2057
0075	-0160	32447		2612	14395	0197	00064	1892
0100	-0167	32627		2627	14398	0243	00105	1750

C-REF-NO 359 YR 1962 DEPTH 88 WAVES 1 24X4 AIR T 00.6 VIS 8
 CONS. NO 071 MONTH 9 MXSAMPD 01 WAVES 2 X0 WET B STN 071
 LAT 71-47 N DAY 08 NO.DPTH 7 WND-DIR 240 WW-CODE
 LON 93-25 W HR 18.7 W-COLOR WND-SPD 13 CLD-TPE 3
 MARSD SQ 262 C/I 1810 W-TRNSP BARO 1010. CLD-AMT 6 HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
187	0000	0230	30280		2420	14531
187	0010	0178	30318		2427	14511
187	0020	0192	30460		2437	14520
187	0030	0071	31183		2502	14477
187	0050	-0133	32250		2596	14401
187	0075	-0150	32426		2610	14400
187	0085	-0153	32435		2611	14400

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0230	30280		2420	14531	0000	00000	3728
0010	0178	30318		2427	14510	0037	00002	3665
0020	0192	30460		2437	14520	0073	00007	3566
0030	0071	31183		2502	14477	0106	00016	2946
0050	-0133	32250		2596	14401	0157	00035	2052
0075	-0150	32426		2610	14400	0206	00067	1910

C-REF-NO 359	YR 1962	DEPTH 229	WAVES 1 22X0	AIR T 01.1	VIS 8
CONS. NO 072	MONTH 9	MXSAMPD 02	WAVES 2 XO	WET B	STN 072
LAT 71-51 N	DAY 08	NO.DPTH 9	WND-DIR 220	WW-CODE	
LON 91-49 W	HR 21.9	W-COLOR	WND-SPD 11	CLD-TPE 8	
MARSD SQ 262	C/I 1810	W-TRNSP	BARO 1013.	CLD-AMT 4	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
219	0000	0090	29300		2350	14455
219	0010	0028	31429		2524	14458
219	0020	-0081	31956		2571	14416
219	0030	-0127	32141		2587	14399
219	0050	-0154	32463		2614	14394
219	0075	-0159	32693		2632	14399
219	0100	-0159	33110		2666	14409
219	0150	-0130	33519		2698	14437
219	0200	-0110				

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0090	29300		2350	14455	0000	00000	4396
0010	0028	31429		2524	14458	0036	00001	2739
0020	-0081	31956		2571	14416	0061	00005	2294
0030	-0127	32141		2587	14399	0083	00011	2139
0050	-0154	32463		2614	14394	0124	00027	1883
0075	-0159	32693		2632	14399	0169	00056	1703
0100	-0159	33110		2666	14409	0208	00090	1381
0125	-0146	3328 I		2680	14422	0241	00128	1250
0150	-0130	33519		2698	14437	0270	00169	1073
0175	-0125 B							
0200	-0110							

C-REF-NO 359	YR 1962	DEPTH 278	WAVES 1 22X0	AIR T 00.6	VIS 8
CONS. NO 073	MONTH 9	MXSAMPD 02	WAVES 2 X0	WET B	STN 073
LAT 71-55 N	DAY 09	NO.DPTH 10	WND-DIR 220	WW-CODE	
LCN 90-36 W	HR 00.5	W-COLOR	WND-SPD 06	CLD-TPE 5	
MARSD SQ 262	C/I 1810	W-TRNSP	BARO 1014.	CLD-AMT 5	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
005	0000	0010	29280		2352	14418
005	0010	-0046	31175		2506	14420
005	0020	-0135	31782		2558	14389
005	0030	-0109	32096		2583	14407
005	0050	-0165	32287		2600	14386
005	0075	-0166	32460		2614	14392
005	0100	-0164	32633		2628	14400
005	0150	-0140	33020		2658	14425
005	0200	-0121	33360		2685	14447
005	0250	-0085	33826		2722	14479

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0010	29280		2352	14418	0000	00000	4379
0010	-0046	31175		2506	14420	0037	00001	2905
0020	-0135	31782		2558	14389	0063	00005	2413
0030	-0109	32096		2583	14407	0086	00011	2178
0050	-0165	32287		2600	14386	0129	00028	2016
0075	-0166	32460		2614	14392	0178	00060	1881
0100	-0164	32633		2628	14400	0223	00100	1746
0125	-0153	32826		2643	14412	0265	00149	1599
0150	-0140	33020		2658	14425	0304	00203	1452
0175	-0131	3319 B		2671	14436	0339	00261	1326
0200	-0121	33360		2685	14447	0371	00322	1195
0225	-0102	3360 C		2704	14463	0399	00382	1015
0250	-0085	33826		2722	14479	0422	00440	0850

C-REF-NO 359	YR 1962	DEPTH 194	WAVES 1 20X3	AIR T 01.7	VIS 7
CONS. NO 074	MONTH 9	MXSAMPD 02	WAVES 2 X0	WET B	STN 074
LAT 70-20 N	DAY 09	NO.DPTH 9	WND-DIR 250	WW-CODE 71	
LON 91-21 W	HR 18.4	W-COLOR	WND-SPD 04	CLD-TPE 7	
MARSD SQ 262	C/I 1810	W-TRNSP	BARO 1008.	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
184	0000	0270	30090		2402	14546
184	0010	0265	30155		2408	14547
184	0020	0252	30283		2419	14544
184	0030	0200	30739		2459	14529
184	0050	0078	31187		2502	14484
184	0075	-0086	32151		2586	14426
184	0100	-0150	32518		2618	14405
184	0150	-0156	32762		2638	14414
184	0190	-0149	32889		2648	14426

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0270	30090		2402	14546	0000	00000	3900
0010	0265	30155		2408	14547	0039	00002	3847
0020	0252	30283		2419	14544	0077	00008	3740
0030	0200	30739		2459	14529	0113	00017	3359
0050	0078	31187		2502	14484	0176	00042	2946
0075	-0086	32151		2586	14426	0240	00082	2139
0100	-0150	32518		2618	14405	0290	00126	1838
0125	-0164 C	3269 F		2632	14405	0335	00178	1703
0150	-0156	32762		2638	14414	0377	00237	1645
0175	-0165 C	3289 F		2649	14416	0417	00304	1539

C-REF-NO 359 YR 1962 DEPTH 146 WAVES 1 29X0 AIR T 01.1 VIS 6
 CONS. NO 075 MONTH 9 MXSAMPD 01 WAVES 2 X0 WET B STN 075
 LAT 70-19 N DAY 09 NO.DPTH 8 WND-DIR 290 WW-CODE
 LON 90-00 W HR 21.3 W-COLOR WND-SPD 05 CLD-TPE
 MARSD SQ 262 C/I 1810 W-TRNSP BARO 1008. CLD-AMT 8 HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
213	0000	0220	29300		2343	14514
213	0010	0169	29350		2350	14493
213	0020	0206	30498		2439	14527
213	0030	0126	31136		2495	14502
213	0050	-0117	31854		2563	14403
213	0075	-0130	32243		2595	14406
213	0100	-0141	32389		2607	14407
213	0140	-0150	32528		2619	14412

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0220	29300		2343	14514	0000	00000	4467
0010	0169	29350		2350	14493	0045	00002	4398
0020	0206	30498		2439	14527	0084	00008	3546
0030	0126	31136		2495	14502	0117	00016	3012
0050	-0117	31854		2563	14403	0171	00038	2360
0075	-0130	32243		2595	14406	0227	00073	2056
0100	-0141	32389		2607	14407	0277	00118	1939
0125	-0147	3253 D		2619	14410	0325	00172	1827

C-REF-NO 359	YR 1962	DEPTH 141	WAVES 1	X0	AIR T 00.6	VIS 8
CONS. NO 076	MONTH 9	MXSAMPD 01	WAVES 2	X0	WET B	STN 076
LAT 70-18 N	DAY 10	NO.DPTH 8	WND-DIR 320		WW-CODE	
LON 88-32 W	HR 01.2	W-COLOR	WND-SPD 04		CLD-TPE 6	
MARSD SQ 261	C/I 1810	W-TRNSP	BARO 1010.		CLD-AMT 7	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
012	0000	-0070	28850		2320	14375
012	0010	-0133	29932		2408	14362
012	0020	-0130	31164		2508	14382
012	0030	-0138	31536		2538	14385
012	0050	-0151	31991		2575	14389
012	0075	-0160	32193		2592	14392
012	0100	-0162	32290		2600	14396
012	0135	-0156	32457		2613	14407

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	-0070	28850		2320	14375	0000	00000	4686
0010	-0133	29932		2408	14362	0043	00002	3839
0020	-0130	31164		2508	14382	0077	00007	2890
0030	-0138	31536		2538	14385	0104	00014	2601
0050	-0151	31991		2575	14389	0153	00034	2246
0075	-0160	32193		2592	14392	0208	00068	2087
0100	-0162	32290		2600	14396	0259	00114	2010
0125	-0159	3242 8		2610	14403	0308	00171	1906

C-REF-NO 359 YR 1962 DEPTH 143 WAVES 1 02X3 AIR T 01.7 VIS 8
 CONS. NO 077 MONTH 9 MXSAMPD 01 WAVES 2 X0 WET B STN 077
 LAT 69-37 N DAY 12 NO.DPTH 8 WND-DIR 020 WW-CODE
 LON 81-22 W HR 04.2 W-COLOR WND-SPD 07 CLD-TPE
 MARSD SQ 225 C/I 1810 W-TRNSP BARO 1028. CLD-AMT 9 HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
042	0000	0110	31340		2512	14492
042	0010	0122	31397		2516	14500
042	0020	0116	31451		2521	14500
042	0030	0103	31589		2533	14498
042	0050	0064	31916		2561	14488
042	0075	-0019	32528		2614	14462
042	0100	-0014	32761		2633	14472
042	0140	-0011	32912		2645	14482

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0110	31340		2512	14492	0000	00000	2848
0010	0122	31397		2516	14500	0028	00001	2811
0020	0116	31451		2521	14500	0057	00006	2766
0030	0103	31589		2533	14497	0084	00013	2654
0050	0064	31916		2561	14488	0134	00033	2383
0075	-0019	32528		2614	14462	0188	00067	1876
0100	-0014	32761		2633	14472	0233	00107	1699
0125	-0030 D	3294 F		2648	14471	0274	00154	1551

C-REF-NO 359	YR 1962	DEPTH 77	WAVES 1 09X0	AIR T 01.1	VIS 9
CONS. NO 078	MONTH 9	MXSAMPD 01	WAVES 2 X0	WET B	STN 078
LAT 68-53 N	DAY 12	NO.DPTH 6	WND-DIR 090	WW-CODE	
LON 80-05 W	HR 11.7	W-COLOR	WND-SPD 06	CLD-TPE 3	
MARSD SQ 225	C/I 1810	W-TRNSP	BARO 1029.	CLD-AMT 7	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
117	0000	0060	31890		2559	14477
117	0010	0047	31868		2558	14473
117	0019	0048	31879		2559	14475
117	0029	0050	31879		2559	14477
117	0049	0050	31887		2560	14481
117	0074	0050	31887		2560	14485

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0060	31890		2559	14477	0000	00000	2402
0010	0047	31868		2558	14473	0024	00001	2413
0020	0048	31879		2559	14475	0048	00005	2404
0030	0050	31879		2559	14477	0073	00011	2405
0050	0051	31884		2559	14481	0121	00031	2401
0075	0050	31887		2560	14485	0181	00070	2397

C-REF-NO 359 YR 1962 DEPTH 102 WAVES 1 03X0 AIR T 01.1 VIS 9
 CONS. NO 079 MONTH 9 MXSAMPD 01 WAVES 2 X0 WET B STN 079
 LAT 66-51 N DAY 13 NO.DPTH 7 WND-DIR 030 WW-CODE
 LON 80-29 W HR 13.2 W-COLOR WND-SPD 06 CLD-TPE 3
 MARSD SQ 225 C/I 1810 W-TRNSP BARO 1020. CLD-AMT 2 HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
132	0000	0060	31610		2537	14473
132	0010	0123	31597		2532	14503
132	0020	0101	31885		2557	14499
132	0030	0090	32079		2573	14498
132	0050	0027	32241		2589	14475
132	0075	-0094	32551		2619	14428
132	0100	-0127	32794		2640	14420

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0060	31610		2537	14473	0000	00000	2616
0010	0123	31597		2532	14503	0027	00001	2659
0020	0101	31885		2557	14499	0052	00005	2427
0030	0090	32079		2573	14498	0076	00011	2273
0050	0027	32241		2589	14475	0120	00029	2117
0075	-0094	32551		2619	14428	0170	00061	1830
0100	-0127	32794		2640	14420	0213	00099	1632

C-REF-NO 359 YR 1962 DEPTH 194 WAVES 1 07X0 AIR T 01.1 VIS 9
 CONS. NO 080 MONTH 9 MXSAMPD 02 WAVES 2 XO WET B STN 080
 LAT 65-33 N DAY 14 NO.DPTH 9 WND-DIR 070 WW-CODE
 LON 80-53 W HR 00.2 W-COLOR WND-SPD 08 CLD-TPE 0
 MARSD SQ 225 C/I 1810 W-TRNSP BARO 1016. CLD-AMT 2 HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
002	0000	0000	30660		2463	14433
002	0010	-0016	30652		2463	14427
002	0020	0009	31308		2515	14449
002	0030	0020				
002	0050	0030	32526		2612	14481
002	0075	0016	32723		2628	14481
002	0100	-0099	32929		2650	14435
002	0150	-0119	33141		2667	14437
002	0190	-0143	33319		2683	14434

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0000	30660		2463	14433	0000	00000	3317
0010	-0016	30652		2463	14427	0033	00002	3316
0020	0009	31308		2515	14449	0064	00006	2823
0030	0020	31836		2557	14463	0091	00013	2424
0050	0030	32526		2612	14481	0134	00030	1901
0075	0016	32723		2628	14481	0180	00059	1743
0100	-0099	32929		2650	14435	0221	00096	1538
0125	-0126 F	3305 C		2660	14428	0259	00139	1434
0150	-0119	33141		2667	14437	0294	00189	1366
0175	-0157 F	3327 C		2679	14425	0327	00244	1251

C-REF-NO 359 YR 1962 DEPTH 241 WAVES 1 04X2 AIR T 00.0 VIS 9
 CONS. NO 081 MONTH 9 MXSAMPD 02 WAVES 2 X0 WET B STN 081
 LAT 65-00 N DAY 14 NO.DPTH 10 WND-DIR 040 WW-CODE
 LON 79-37 W HR 06.5 W-COLOR WND-SPD 06 CLD-TPE 0
 MARSD SQ 224 C/I 1810 W-TRNSP BARO 1012. CLD-AMT 2 HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
065	0000	0028	31510		2530	14457
065	0010	0020	32074		2576	14463
065	0020	0006	32400		2603	14463
065	0030	-0001	32585		2618	14464
065	0050	-0011	32833		2639	14466
065	0075	-0032	32968		2650	14462
065	0100	-0048	32997		2653	14459
065	0150	-0136	32998		2656	14427
065	0200	-0149	33376		2687	14434
065	0240	-0152	33447		2693	14440

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0028	31510		2530	14457	0000	00000	2678
0010	0020	32074		2576	14463	0025	00001	2243
0020	0006	32400		2603	14463	0046	00004	1987
0030	-0001	32585		2618	14464	0065	00009	1842
0050	-0011	32833		2639	14466	0100	00023	1648
0075	-0032	32968		2650	14462	0141	00049	1534
0100	-0048	32997		2653	14459	0179	00083	1505
0125	-0092 C	3298 E		2654	14443	0217	00127	1501
0150	-0136	32998		2656	14427	0254	00180	1470
0175	-0148 B	3318 G		2672	14428	0289	00238	1323
0200	-0149	33376		2687	14434	0321	00299	1173
0225	-0158 B	3338 H		2688	14434	0350	00363	1166

C-REF-NO 359	YR 1962	DEPTH 218	WAVES 1 04X6	AIR T 03.3	VIS 9
CONS. NO 082	MONTH 9	MXSAMPD 02	WAVES 2 11X0	WET B	STN 082
LAT 64-12 N	DAY 14	NO.DPTH 9	WND-DIR 040	WW-CODE	
LON 78-12 W	HR 12.9	W-COLOR	WND-SPD 06	CLD-TPE 3	
MARSD SQ 224	C/I 1810	W-TRNSP	BARO 1009.	CLD-AMT 7	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
129	0000	0044	31420		2522	14463
129	0008	0031	31528		2532	14460
129	0017	0041	31645		2541	14468
129	0026	0061	31798		2552	14481
129	0043	0013	32193		2586	14467
129	0065	0044	33027		2651	14496
129	0087	0033	33034		2653	14495
129	0130	0026	33038		2653	14499
129	0173	-0013	33112		2661	14489

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0044	31420		2522	14463	0000	00000	2754
0010	0032	31553		2534	14461	0027	00001	2646
0020	0049	31692		2544	14473	0053	00005	2548
0030	0052 C	31875		2559	14478	0078	00012	2409
0050	0019 C	3248 I		2609	14475	0122	00029	1928
0075	0041	3308 I		2656	14498	0165	00056	1482
0100	0032	33032		2653	14497	0203	00090	1515
0125	0027	33036		2653	14499	0241	00134	1509
0150	0005 B	3308 B		2657	14493	0278	00187	1468
0175	-0015	33116		2662	14489	0315	00247	1426

C-REF-NO 359	YR 1962	DEPTH 309	WAVES 1 00X9	AIR T 04.4	VIS 9
CONS. NO 083	MONTH 9	MXSAMPD 03	WAVES 2 1246	WET B	STN 083
LAT 64-00 N	DAY 14	NO.DPTH 10	WND-DIR 040	WW-CODE	
LON 76-44 W	HR 21.7	W-COLOR	WND-SPD 13	CLD-TPE 3	
MARSD SQ 224	C/I 1810	W-TRNSP	BARO 1010.	CLD-AMT 4	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
217	0000	0194	32580		2606	14547
217	0010	0179	32593		2608	14542
217	0019	0180	32597		2609	14544
217	0029	0169	32615		2611	14541
217	0047	0123	32788		2628	14526
217	0070	0101	32850		2634	14521
217	0094	0076	32890		2639	14514
217	0141	0004	33096		2659	14492
217	0187	-0054	33288		2677	14475
217	0281	-0064	33331		2681	14487

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0194	32580		2606	14547	0000	00000	1956
0010	0179	32593		2608	14542	0020	00001	1936
0020	0179	32597		2609	14544	0039	00004	1934
0030	0167	32624		2612	14540	0058	00009	1905
0050	0119	32802		2629	14525	0095	00024	1740
0075	0096	32858		2635	14519	0138	00051	1683
0100	0067	32912		2641	14511	0180	00089	1625
0125	0030	3302 B		2651	14499	0220	00134	1525
0150	-0009	33138		2663	14488	0257	00186	1412
0175	-0041	33244		2673	14478	0291	00244	1316
0200	-0057 B	3329 D		2677	14476	0324	00306	1273
0225	-0068 B	3333 D		2681	14475	0355	00375	1239
*0250	-0071	3334 C		2682	14478	0386	00451	1225

C-REF-NO 359	YR 1962	DEPTH 296	WAVES 1 04X3	AIR T 02.8	VIS 9
CONS. NO 084	MONTH 9	MXSAMPD 03	WAVES 2 26	WET B	STN 084
LAT 63-39 N	DAY 15	NO.DPTH 10	WND-DIR 040	WW-CODE 02	
LON 78-08 W	HR 03.3	W-COLOR	WND-SPD 10	CLD-TPE	
MARSD SQ 224	C/I 1810	W-TRNSP	BARO 1011.	CLD-AMT 0	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
033	0000	0156	32800		2627	14533
033	0010	0143	32797		2627	14529
033	0020	0143	32800		2627	14530
033	0030	0116	32830		2632	14520
033	0050	0095	32864		2636	14515
033	0075	0078	32895		2639	14512
033	0100	0067	32915		2641	14511
033	0150	0040	32964		2647	14508
033	0200	0006	33096		2659	14502
033	0290	-0106	33373		2686	14469

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0156	32800		2627	14533	0000	00000	1764
0010	0143	32797		2627	14529	0018	00001	1758
0020	0143	32800		2627	14530	0035	00004	1756
0030	0116	32830		2632	14520	0053	00008	1716
0050	0095	32864		2636	14515	0087	00022	1678
0075	0078	32895		2639	14512	0129	00049	1644
0100	0067	32915		2641	14511	0170	00086	1623
0125	0054	32934		2643	14510	0211	00133	1601
0150	0040	32964		2647	14508	0251	00189	1570
0175	0025	33024		2652	14506	0289	00254	1516
0200	0006	33096		2659	14502	0327	00326	1450
0225	-0022	3315 C		2664	14494	0363	00404	1396
0250	-0052	3323 B		2672	14486	0397	00487	1322

C-REF-NO 359	YR 1962	DEPTH 230	WAVES 1 03X4	AIR T 01.1	VIS 8
CONS. NO 085	MONTH 9	MXSAMPD 02	WAVES 2 26	WET B	STN 085
LAT 63-19 N	DAY 15	NO.DPTH 9	WND-DIR	WW-CODE 02	
LN 79-10 W	HR 07.5	W-COLOR	WND-SPD 13	CLD-TPE	
MARSD SQ 224	C/I 1810	W-TRNSP	BARO 1012.	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
075	0000	0022	30750		2470	14444
075	0009	0002	30694		2466	14436
075	0018	0008	30741		2469	14440
075	0026	0005	31505		2531	14451
075	0044	0032	32680		2624	14483
075	0066	-0079	32861		2644	14438
075	0088	-0123	32949		2652	14422
075	0132	-0120	33047		2660	14432
075	0176	-0113	33125		2666	14443

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0022	30750		2470	14444	0000	00000	3257
0010	0002	3068 C		2464	14436	0033	00002	3305
0020	0007	3091 G		2483	14443	0065	00007	3129
0030	0014 B	3184 B		2557	14460	0093	00014	2419
0050	0006 D	3280 I		2635	14474	0134	00030	1679
0075	-0103	32904		2648	14428	0175	00056	1557
0100	-0128 B	32982		2655	14422	0214	00090	1488
0125	-0125 B	33036		2659	14428	0251	00133	1446
0150	-0134 D	3309 B		2664	14429	0286	00183	1398
0175	-0114	33124		2666	14443	0321	00241	1379

C-REF-NO 359	YR 1962	DEPTH 143	WAVES 1	X0	AIR T 00.0	VIS 9
CONS. NO 086	MONTH 9	MXSAMPD 01	WAVES 2	X0	WET B	STN 086
LAT 63-20 N	DAY 15	NO.DPTH 8	WND-DIR		WW-CODE	
LON 80-36 W	HR 12.5	W-COLOR	WND-SPD 13		CLD-TPE 0	
MARSD SQ 225	C/I 1810	W-TRNSP	BARO 1016.		CLD-AMT 2	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
125	0000	0022	29840		2396	14432
125	0010	0023	29937		2404	14435
125	0019	0022	29946		2405	14436
125	0029	-0074	30941		2488	14407
125	0047	-0087	32251		2595	14422
125	0070	-0135	32824		2642	14411
125	0094	-0145	33041		2660	14414
125	0131	-0131	33139		2668	14428

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0022	29840		2396	14432	0000	00000	3954
0010	0023	29937		2404	14435	0039	00002	3879
0020	0013 B	3003 E		2412	14433	0078	00008	3806
0030	-0077	31032		2496	14407	0112	00016	3004
0050	-0093	3237 D		2604	14421	0162	00036	1970
0075	-0139	3289 B		2648	14411	0207	00064	1557
0100	-0152 B	3314 I		2669	14413	0243	00096	1358
0125	-0138	3317 C		2670	14424	0277	00135	1339

C-REF-NO 359 YR 1962 DEPTH 220 WAVES 1 33X4 AIR T 05.6 VIS 9
 CONS. NO 087 MONTH 9 MXSAMPD 02 WAVES 2 0626 WET B STN 087
 LAT 62-58 N DAY 15 NO.DPTH 9 WND-DIR 330 WW-CODE 02
 LON 81-48 W HR 17.0 W-COLOR WND-SPD 05 CLD-TPE 0
 MARSD SQ 225 C/I 1810 W-TRNSP BARO 1017. CLD-AMT 1 HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
170	0000	0389	30756		2445	14607
170	0010	0365	30780		2449	14599
170	0020	0267	31108		2483	14562
170	0030	0109	31669		2539	14501
170	0050	-0123	32542		2619	14410
170	0075	-0147	32829		2643	14407
170	0100	-0142	32937		2652	14415
170	0150	-0127	33074		2662	14432
170	0200	-0120	33121		2666	14444

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0389	30756		2445	14607	0000	00000	3490
0010	0365	30780		2449	14599	0035	00002	3452
0020	0267	31108		2483	14562	0068	00007	3125
0030	0109	31669		2539	14501	0097	00014	2596
0050	-0123	32542		2619	14410	0141	00031	1830
0075	-0147	32829		2643	14407	0184	00059	1602
0100	-0142	32937		2652	14415	0224	00094	1518
0125	-0134	33018		2658	14423	0261	00137	1457
0150	-0127	33074		2662	14432	0297	00188	1414
0175	-0124	33111		2665	14438	0333	00247	1386
0200	-0120	33121		2666	14444	0368	00314	1378

C-REF-NO 359	YR 1962	DEPTH 143	WAVES 1 35X6	AIR T 04.4	VIS 9
CONS. NO 088	MONTH 9	MXSAMPD 01	WAVES 2 0446	WET B	STN 088
LAT 62-48 N	DAY 15	NO.DPTH 8	WND-DIR 350	WW-CODE 02	
LON 81-20 W	HR 18.9	W-COLOR	WND-SPD 04	CLD-TPE 0	
MARSD SQ 225	C/I 1810	W-TRNSP	BARO 1018.	CLD-AMT 1	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
189	0000	0439	30160		2393	14620
189	0010	0423	30134		2393	14615
189	0020	0419	30169		2396	14615
189	0030	0150	31531		2525	14518
189	0050	-0132	32025		2578	14398
189	0075	-0130	32584		2623	14411
189	0100	-0130	32914		2649	14420
189	0130	-0130	33020		2658	14426

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0439	30160		2393	14620	0000	00000	3985
0010	0423	30134		2393	14615	0040	00002	3991
0020	0419	30169		2396	14615	0080	00008	3961
0030	0150	31531		2525	14518	0114	00016	2725
0050	-0132	32025		2578	14398	0163	00036	2225
0075	-0130	32584		2623	14411	0214	00068	1794
0100	-0130	32914		2649	14420	0256	00105	1539
0125	-0130	33025		2658	14426	0294	00149	1453

C-REF-NO 359 YR 1962 DEPTH 208 WAVES 1 X4 AIR T 04.4 VIS 9
 CONS. NO 089 MONTH 9 MXSAMPD 02 WAVES 2 46 WET B STN 089
 LAT 62-38 N DAY 15 NO.DPTH 9 WND-DIR WW-CODE 02
 LON 80-46 W HR 21.5 W-COLOR WND-SPD 05 CLD-TPE 0
 MARSD SQ 225 C/I 1810 W-TRNSP BARO 1018. CLD-AMT 1 HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
215	0000	0411	30148		2395	14608
215	0010	0394	30116		2394	14602
215	0019	0390	30124		2395	14602
215	0029	-0028	31441		2527	14435
215	0047	-0088	32350		2603	14423
215	0070	-0063	32828		2640	14445
215	0094	-0092	32922		2649	14437
215	0138	-0076	33130		2665	14455
215	0188	-0094	33251		2676	14456

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0411	30148		2395	14608	0000	00000	3969
0010	0394	30116		2394	14602	0040	00002	3978
0020	0352 E	3024 G		2407	14587	0079	00008	3851
0030	-0044 D	3152 C		2534	14429	0112	00016	2638
0050	-0087 B	3245 B		2610	14426	0158	00034	1916
0075	-0068	3286 C		2643	14444	0202	00062	1600
0100	-0092 B	32952		2651	14439	0241	00097	1523
0125	-0084 B	33071		2661	14448	0279	00140	1433
0150	-0097 F	3315 D		2667	14447	0314	00190	1369
0175	-0096 C	3322 B		2673	14452	0348	00246	1313

C-REF-NO 359	YR 1962	DEPTH 117	WAVES 1 06X0	AIR T 02.2	VIS 9
CONS. NO 090	MONTH 9	MXSAMPD 01	WAVES 2 04X0	WET B	STN 090
LAT 62-20 N	DAY 16	NO.DPTH 7	WND-DIR	WW-CODE 00	
LON 80-06 W	HR 00.6	W-COLOR	WND-SPD 04	CLD-TPE	
MARSD SQ 225	C/I 1810	W-TRNSP	BARO 1018.	CLD-AMT 9	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
006	0000	0183	30304		2425	14511
006	0010	0171	30264		2423	14507
006	0020	0108	30372		2435	14481
006	0030	-0005	30914		2484	14439
006	0050	-0088	31970		2572	14418
006	0075	-0113	32274		2597	14415
006	0100	-0108	32724		2633	14428

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0183	30304		2425	14511	0000	00000	3679
0010	0171	30264		2423	14507	0037	00002	3702
0020	0108	30372		2435	14481	0074	00008	3584
0030	-0005	30914		2484	14439	0107	00016	3118
0050	-0088	31970		2572	14418	0162	00037	2279
0075	-0113	32274		2597	14415	0216	00072	2037
0100	-0108	32724		2633	14428	0263	00113	1692

C-REF-NO 359	YR 1962	DEPTH 220	WAVES 1 27X3	AIR T 02.2	VIS 6
CONS. NO 091	MONTH 9	MXSAMPD 02	WAVES 2 2782	WET B	STN 091
LAT 61-50 N	DAY 16	NO.DPTH 9	WND-DIR 270	WW-CODE 41	
LON 81-58 W	HR 08.1	W-COLOR	WND-SPD 08	CLD-TPE 7	
MARSD SQ 225	C/I 1810	W-TRNSP	BARO 1017.	CLD-AMT 7	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
081	0000	0411	29621		2353	14601
081	0010	0410	29624		2353	14602
081	0020	0412	29590		2351	14604
081	0030	0030	30930		2484	14455
081	0050	-0107	32235		2594	14413
081	0075	-0110	32768		2637	14423
081	0100	-0105	33067		2661	14434
081	0150	-0107	33202		2672	14443
081	0200	-0106	33314		2681	14453

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0411	29621		2353	14601	0000	00000	4367
0010	0410	29624		2353	14602	0044	00002	4364
0020	0412	29590		2351	14604	0088	00009	4392
0030	0030	30930		2484	14455	0126	00018	3121
0050	-0107	32235		2594	14413	0178	00039	2070
0075	-0110	32768		2637	14423	0225	00068	1659
0100	-0105	33067		2661	14434	0264	00103	1430
0125	-0105	3318 F		2670	14439	0299	00143	1346
0150	-0107	33202		2672	14443	0332	00190	1323
0175	-0104	3334 I		2683	14450	0364	00244	1221
0200	-0106	33314		2681	14453	0395	00303	1235

C-REF-NO 359	YR 1962	DEPTH 170	WAVES 1 24X2	AIR T 03.9	VIS 7
CONS. NO 092	MONTH 9	MXSAMPD 01	WAVES 2 X0	WET B	STN 092
LAT 61-51 N	DAY 16	NO.DPTH 8	WND-DIR 240	WW-CODE 41	
LON 84-47 W	HR 17.6	W-COLOR	WND-SPD 06	CLD-TPE 6	
MARSD SQ 225	C/I 1810	W-TRNSP	BARO 1014.	CLD-AMT 7	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
176	0000	0450	30055		2384	14623
176	0010	0438	30034		2383	14620
176	0020	0431	30080		2388	14619
176	0030	-0090	31969		2572	14414
176	0050	-0128	32549		2620	14408
176	0075	-0129				
176	0100	-0108	32991		2655	14431
176	0150	-0090	33092		2663	14449

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0450	30055		2384	14623	0000	00000	4075
0010	0438	30034		2383	14620	0041	00002	4080
0020	0431	30080		2388	14619	0082	00008	4039
0030	-0090	31969		2572	14414	0114	00016	2281
0050	-0128	32549		2620	14408	0155	00032	1823
0075	-0129	3288 I		2647	14416	0197	00059	1566
0100	-0108	32991		2655	14431	0236	00094	1487
0125	-0104 B	3322 I		2673	14440	0271	00134	1315
0150	-0090	33092		2663	14449	0306	00183	1413

C-REF-NO 359 YR 1962 DEPTH 190 WAVES 1 16XX AIR T 04.4 VIS 8
 CONS. NO 093 MONTH 9 MXSAMPD 02 WAVES 2 X0 WET B STN 093
 LAT 61-45 N DAY 17 NO.DPTH 9 WND-DIR 160 HW-CODE 00
 LON 87-28 W HR 02.3 W-COLOR WND-SPD 05 CLD-TPE
 MARSD SQ 225 C/I 1810 W-TRNSP BARO 1011. CLD-AMT 9 HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
023	0000	0400	30833		2450	14613
023	0010	0379	30812		2450	14605
023	0020	0381	30817		2451	14608
023	0030	0356	30826		2454	14599
023	0050	-0148	32094		2584	14392
023	0075	-0112	32864		2645	14424
023	0100	-0091	33011		2656	14440
023	0150	-0076	33116		2664	14456
023	0180	-0085	33133		2666	14457

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0400	30833		2450	14613	0000	00000	3442
0010	0379	30812		2450	14605	0035	00002	3439
0020	0381	30817		2451	14608	0069	00007	3438
0030	0356	30826		2454	14599	0104	00016	3410
0050	-0148	32094		2584	14392	0160	00038	2168
0075	-0112	32864		2645	14424	0207	00067	1585
0100	-0091	33011		2656	14440	0245	00101	1478
0125	-0079	3309 B		2662	14450	0282	00143	1424
0150	-0076	33116		2664	14456	0318	00194	1400
0175	-0083	33137		2666	14458	0353	00252	1380

C-REF-NO 359	YR 1962	DEPTH 128	WAVES 1 11X0	AIR T 04.4	VIS 1
CONS. NO 094	MONTH 9	MXSAMPD 01	WAVES 2 X0	WET B	STN 094
LAT 61-45 N	DAY 17	NO.DPTH 8	WND-DIR 090	WW-CODE 47	
LOU 90-02 W	HR 09.8	W-COLOR	WND-SPD 05	CLD-TPE	
MARSD SQ 226	C/I 1810	W-TRNSP	BARO 1007.	CLD-AMT 9	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
098	0000	0444	31170		2473	14636
098	0010	0437	31151		2472	14634
098	0020	0438	31158		2472	14636
098	0030	0350	31356		2496	14603
098	0050	-0148	32945		2652	14404
098	0075	-0173	33215		2675	14400
098	0100	-0177	33404		2690	14405
098	0125	-0177	33457		2695	14410

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0444	31170		2473	14636	0000	00000	3228
0010	0437	31151		2472	14634	0032	00002	3236
0020	0438	31158		2472	14636	0065	00007	3233
0030	0350	31356		2496	14603	0096	00015	3004
0050	-0148	32945		2652	14404	0142	00032	1514
0075	-0173	33215		2675	14400	0177	00054	1299
0100	-0177	33404		2690	14405	0208	00082	1151
0125	-0177	33457		2695	14410	0237	00114	1109

C-REF-NO 359	YR 1962	DEPTH 95	WAVES 1 02XX	AIR T 05.6	VIS 6
CONS. NO 095	MONTH 9	MXSAMPD 01	WAVES 2 0246	WET B	STN 095
LAT 61-28 N	DAY 17	NO.DPTH 6	WND-DIR 020	WW-CODE 47	
LON 92-40 W	HR 18.0	W-COLOR	WND-SPD 14	CLD-TPE	
MARSD SQ 226	C/I 1810	W-TRNSP	BARO 1009.	CLD-AMT 9	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
180	0000	0483	30910		2448	14649
180	0010	0471	30874		2446	14645
180	0020	0460	30981		2456	14643
180	0030	0169	31900		2554	14531
180	0050	-0035	32572		2619	14451
180	0075	-0075	32735		2633	14439

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0483	30910		2448	14649	0000	00000	3462
0010	0471	30874		2446	14645	0035	00002	3478
0020	0460	30981		2456	14643	0069	00007	3387
0030	0169	31900		2554	14531	0099	00014	2456
0050	-0035	32572		2619	14451	0142	00031	1837
0075	-0075	32735		2633	14439	0186	00060	1696

C-REF-NO 359 YR 1962 DEPTH 119 WAVES 1 03XX AIR T 05.6 VIS 8
 CONS. NO 096 MONTH 9 MXSAMPD 01 WAVES 2 0382 WET B STN 096
 LAT 61-00 N DAY 17 NO.DPTH 7 WND-DIR 030 WW-CODE 00
 LON 92-12 W HR 21.6 W-COLOR WND-SPD 15 CLD-TPE 6
 MARSD SQ 226 C/I 1810 W-TRNSP BARO 1010. CLD-AMT 8 HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
216	0000	0506	31377		2482	14664
216	0008	0497	31365		2482	14662
216	0017	0498	31372		2483	14664
216	0025	0493	31380		2484	14663
216	0042	-0070	32711		2631	14436
216	0063	-0168	33210		2674	14400
216	0085	-0176	33363		2687	14402

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0506	31377		2482	14664	0000	00000	3134
0010	0497	31366		2483	14662	0032	00002	3134
0020	0506 C	3135 D		2480	14667	0063	00006	3154
0030	0344 I	3172 I		2526	14605	0093	00014	2723
0050	-0151 I	3300 I		2657	14403	0135	00030	1474

C-REF-NO 359	YR 1962	DEPTH 106	WAVES 1 03XX	AIR T 05.0	VIS 8
CONS. NO 097	MONTH 9	MXSAMPD 01	WAVES 2 0382	WET B	STN 097
LAT 60-33 N	DAY 18	NO.DPTH 7	WND-DIR 030	WW-CODE 00	
LON 92-32 W	HR 00.8	W-COLOR	WND-SPD 14	CLD-TPE 6	
MARSD SQ 226	C/I 1810	W-TRNSP	BARO 1013.	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
008	0000	0489	31353		2482	14657
008	0009	0480	31324		2481	14654
008	0017	0481	31335		2482	14656
008	0026	0483	31336		2482	14658
008	0043	-0144	32809		2641	14402
008	0065	-0165	33200		2673	14402
008	0087	-0168	33391		2689	14407

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0489	31353		2482	14657	0000	00000	3134
0010	0480	31325		2481	14654	0032	00002	3147
0020	0494 D	3131 E		2478	14662	0063	00007	3177
0030	0349 I	3164 I		2519	14606	0093	00014	2787
0050	-0200 I	3304 I		2661	14380	0136	00030	1432
0075	-0294 I	3353 I		2702	14346	0167	00049	1039

C-REF-NO 359	YR 1962	DEPTH 90	WAVES 1 35XX	AIR T 03.9	VIS 8
CONS. NO 098	MONTH 9	MXSAMPD 01	WAVES 2 26	WET 8	STN 098
LAT 59-57 N	DAY 18	NO.DPTH 6	WND-DIR 350	WW-CODE	
LON 92-46 W	HR 05.1	W-COLOR	WND-SPD 14	CLD-TPE	
MARSD SQ 190	C/I 1810	W-TRNSP	BARO 1015.	CLD-AMT 9	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
051	0000	0506	31099		2460	14661
051	0010	0499	31067		2459	14659
051	0020	0499	31069		2459	14661
051	0030		31418			
051	0050	-0162	32987		2656	14398
051	0075	-0171	33271		2679	14402

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0506	31099		2460	14661	0000	00000	3343
0010	0499	31067		2459	14659	0034	00002	3360
0020	0499	31069		2459	14661	0067	00007	3360
0030	0294 I	31418		2506	14580	0099	00015	2912
0050	-0162	32987		2656	14398	0143	00032	1479
0075	-0171	33271		2679	14401	0178	00053	1257

C-REF-NO 359	YR 1962	DEPTH 48	WAVES 1 34XX	AIR T 02.8	VIS 8
CONS. NO 099	MONTH 9	MXSAMPD 00	WAVES 2 3546	WET B	STN 099
LAT 59-20 N	DAY 18	NO.DPTH 5	WND-DIR 340	WW-CODE 02	
LON 93-30 W	HR 10.6	W-COLOR	WND-SPD 18	CLD-TPE 6	
MARSD SQ 190	C/I 1810	W-TRNSP	BARO 1019.	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
106	0000	0456	30296		2402	14629
106	0008	0458	30238		2397	14630
106	0015		31331			
106	0023	0177	31540		2524	14529
106	0034	0111	31562		2530	14501

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0456	30296		2402	14629	0000	00000	3898
0010	0425 F	3054 I		2424	14621	0038	00002	3686
0020	0239 H	3154 I		2520	14556	0071	00007	2780
0030	0165 I	3175 I		2542	14527	0098	00013	2571

C-REF-NO 359	YR 1962	DEPTH 80	WAVES 1 34XX	AIR T 03.9	VIS 8
CONS. NO 100	MONTH 9	MXSAMPD 01	WAVES 2 46	WET B	STN 100
LAT 59-00 N	DAY 19	NO.DPTH 6	WND-DIR 340	W-CODE 00	
LON 92-40 W	HR 03.4	W-COLOR	WND-SPD 14	CLD-TPE	
MARSD SQ 190	C/I 1810	W-TRNSP	BARO 1022.	CLD-AMT 9	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
034	0000	0467	30454		2414	14636
034	0010	0458	30441		2413	14633
034	0019	0460	30444		2414	14636
034	0029	0460	30457		2415	14638
034	0047		31748			
034	0070	0039	31906		2562	14479

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0467	30454		2414	14636	0000	00000	3790
0010	0458	30441		2413	14633	0038	00002	3792
0020	0461	3043 B		2413	14636	0076	00008	3800
0030	0444 D	3052 F		2421	14632	0114	00017	3719
0050	0304 D	3137 I		2501	14587	0181	00044	2959

C-REF-NO 359 YR 1962 DEPTH 110 WAVES 1 XX AIR T 03.3 VIS 8
 CONS. NO 101 MONTH 9 MXSAMPD 01 WAVES 2 86 WET B STN 101
 LAT 59-19 N DAY 19 NO.DPTH 7 WND-DIR WW-CODE 00
 LON 91-10 W HR 09.1 W-COLOR WND-SPD 13 CLD-TPE 8
 MARSD SQ 190 C/I 1810 W-TRNSP BARO 1020. CLD-AMT 6 HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
091	0000	0489	31344		2482	14657
091	0009	0483	31323		2481	14656
091	0017	0483	31320		2480	14657
091	0026		32097			
091	0043		32759			
091	0065	-0160	32875		2647	14399
091	0087	-0160	32875		2647	14403

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0489	31344		2482	14657	0000	00000	3141
0010	0484	3130 C		2479	14656	0032	00002	3166
0020	0454 E	3155 I		2502	14648	0062	00006	2953
0030	0382 F	3232 D		2570	14630	0089	00013	2303
0050	0127 D	3285 G		2632	14529	0129	00029	1710
0075	-0073 I	3299 I		2654	14444	0170	00054	1499

C-REF-NO 359	YR 1962	DEPTH 155	WAVES 1 34XX	AIR T 04.4	VIS 9
CONS. NO 102	MONTH 9	MXSAMPD 01	WAVES 2 46	WET B	STN 102
LAT 59-49 N	DAY 19	NO.DPTH 8	WND-DIR 340	WW-CODE 01	
LON 90-10 W	HR 14.9	W-COLOR	WND-SPD 12	CLD-TPE 3	
MARSD SQ 190	C/I 1810	W-TRNSP	BARO 1020.	CLD-AMT 3	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
149	0000	0439	31222		2477	14634
149	0008	0431	31219		2478	14632
149	0016	0432	31219		2478	14634
149	0024	0429	31230		2479	14634
149	0040	-0118	32530		2618	14410
149	0061	-0157	32780		2639	14399
149	0081	-0150	32955		2653	14408
149	0121	-0152	33079		2663	14415

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0439	31222		2477	14634	0000	00000	3184
0010	0431	31218		2478	14632	0032	00002	3180
0020	0442 D	3120 D		2475	14638	0064	00007	3207
0030	0240 I	3167 I		2531	14560	0094	00014	2677
0050	-0188 I	3276 I		2638	14382	0137	00031	1650
0075	-0154	32910		2650	14404	0177	00056	1538
0100	-0164 C	33047		2661	14406	0215	00090	1428
0125	-0148	33076		2663	14418	0250	00131	1408

C-REF-NO 359	YR 1962	DEPTH 183	WAVES 1 34XX	AIR T 03.3	VIS 8
CONS. NO 103	MONTH 9	MXSAMPD 01	WAVES 2 26	WET B	STN 103
LAT 58-56 N	DAY 20	NO.DPTH 7	WND-DIR 340	WW-CODE 15	
LON 88-00 W	HR 00.3	W-COLOR	WND-SPD 09	CLD-TPE 6	
MARSD SQ 189	C/I 1810	W-TRNSP	BARO 1021.	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
003	0000	0418	30949		2458	14622
003	0009	0394	30921		2458	14613
003	0017	0397	30928		2458	14615
003	0043	-0159	32532		2619	14391
003	0064	-0155	32669		2630	14399
003	0086	-0120	32951		2652	14423
003	0129	-0142	33144		2668	14422

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0418	30949		2458	14622	0000	00000	3370
0010	0396	30915		2457	14614	0034	00002	3377
0020	0339 I	3109 I		2476	14593	0067	00007	3194
0030	0134 I	3168 I		2538	14513	0096	00014	2604
0050	-0182 G	3263 I		2627	14383	0140	00031	1750
0075	-0138 B	3281 C		2641	14411	0182	00058	1620
0100	-0134 E	3298 I		2655	14419	0221	00093	1487
0125	-0140	3312 B		2667	14422	0258	00134	1374

C-REF-NO 359	YR 1962	DEPTH 117	WAVES 1 30XX	AIR T 02.2	VIS 8
CONS. NO 104	MONTH 9	MXSAMPD 01	WAVES 2 3446	WET B	STN 104
LAT 58-41 N	DAY 20	NO.DPTH 7	WND-DIR 300	WW-CODE 16	
LON 84-45 W	HR 10.9	W-COLOR	WND-SPD 10	CLD-TPE 6	
MARSD SQ 189	C/I 1810	W-TRNSP	BARO 1020.	CLD-AMT 6	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
109	0000	0467	29908		2370	14629
109	0010	0470	29947		2373	14632
109	0019	0449	30139		2390	14627
109	0029	0434	30259		2401	14624
109	0047	-0143	32124		2586	14394
109	0070	-0145	32857		2645	14407
109	0094	-0144	33043		2660	14414

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0467	29908		2370	14629	0000	00000	4202
0020	0452 B	3014 C		2390	14629	0083	00008	4015
0030	0405 E	3035 G		2411	14613	0123	00018	3812
0050	-0167 H	3229 F		2600	14386	0181	00041	2015

C-REF-NO 359	YR 1962	DEPTH 179	WAVES 1 34XX	AIR T 02.2	VIS 8
CONS. NO 105	MONTH 9	MXSAMPD 02	WAVES 2 0146	WET B	STN 105
LAT 58-40 N	DAY 20	NO.DPTH 9	WND-DIR 340	WV-CODE 01	
LON 82-35 W	HR 17.3	W-COLOR	WND-SPD 08	CLD-TPE 3	
MARSD SQ 189	C/I 1810	W-TRNSP	BARO 1019.	CLD-AMT 5	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
173	0000	0506	29361		2323	14638
173	0010	0499	29342		2322	14636
173	0020	0497	29339		2322	14637
173	0030	-0042	31175		2506	14425
173	0050	-0147	31924		2570	14390
173	0075	-0161	32216		2594	14391
173	0100	-0147	32897		2649	14412
173	0150	-0147	33127		2667	14423
173	0175	-0149	33178		2671	14427

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0506	29361		2323	14638	0000	00000	4652
0010	0499	29342		2322	14636	0047	00002	4660
0020	0497	29339		2322	14637	0094	00010	4660
0030	-0042	31175		2506	14425	0132	00019	2905
0050	-0147	31924		2570	14390	0184	00040	2299
0075	-0161	32216		2594	14391	0239	00075	2069
0100	-0147	32897		2649	14412	0284	00115	1548
0125	-0144	3312 I		2666	14420	0321	00157	1378
0150	-0147	33127		2667	14423	0356	00206	1368
0175	-0149	33178		2671	14427	0390	00262	1326

C-REF-NO 359	YR 1962	DEPTH 185	WAVES 1 32XX	AIR T 04.4	VIS 8
CONS. NO 106	MONTH 9	MXSAMPD 01	WAVES 2 42	WET B	STN 106
LAT 58-38 N	DAY 20	NO.DPTH 8	WND-DIR 320	WW-CODE 15	
LON 81-04 W	HR 21.8	W-COLOR	WND-SPD 06	CLD-TPE 3	
MARSD SQ 189	C/I 1810	W-TRNSP	BARO 1020.	CLD-AMT 6	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
218	0000	0550	28744		2270	14648
218	0010	0543	28707		2268	14646
218	0020	0512	28884		2285	14637
218	0030	0498	28925		2290	14633
218	0050	-0139	31543		2539	14388
218	0075	-0137	32391		2607	14405
218	0100	-0141	32899		2649	14415
218	0150	-0145	33157		2670	14425

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0550	28744		2270	14648	0000	00000	5161
0010	0543	28707		2268	14646	0052	00003	5182
0020	0512	28884		2285	14637	0103	00010	5018
0030	0498	28925		2290	14633	0153	00023	4974
0050	-0139	31543		2539	14388	0229	00052	2593
0075	-0137	32391		2607	14405	0286	00087	1940
0100	-0141	32899		2649	14415	0330	00126	1548
0125	-0141	3318 C		2671	14422	0366	00168	1329
0150	-0145	33157		2670	14425	0400	00215	1345

C-REF-NO 359	YR 1962	DEPTH 177	WAVES 1 27XX	AIR T 03.3	VIS B
CONS. NO 107	MONTH 9	MXSAMPD 01	WAVES 2 XO	WET B	STN 107
LAT 58-39 N	DAY 21	NO.DPTH 8	WND-DIR 270	WW-CODE 00	
LON 79-26 W	HR 03.7	W-COLOR	WND-SPD 05	CLD-TPE	
MARSD SQ 188	C/I 1810	W-TRNSP	BARO 1019.	CLD-AMT 9	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
037	0000	0506	27745		2196	14616
037	0010	0502	27706		2193	14616
037	0020	0489	27745		2197	14612
037	0030	0203	29154		2332	14509
037	0050	-0099	30721		2471	14396
037	0075	-0148	31657		2548	14390
037	0100	-0148	32358		2605	14404
037	0150	-0145	32782		2639	14419

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0506	27745		2196	14616	0000	00000	5871
0010	0502	27706		2193	14616	0059	00003	5897
0020	0489	27745		2197	14612	0118	00012	5855
0030	0203	29154		2332	14509	0170	00025	4566
0050	-0099	30721		2471	14396	0249	00056	3235
0075	-0148	31657		2548	14390	0321	00101	2502
0100	-0148	32358		2605	14404	0377	00150	1961
0125	-0162 C	3271 C		2633	14406	0423	00203	1689
0150	-0145	32782		2639	14419	0465	00262	1633

C-REF-NO 359	YR 1962	DEPTH 124	WAVES 1 22XX	AIR T 03.9	VIS 8
CONS. NO 108	MONTH 9	MXSAMPD 01	WAVES 2 X0	WET B	STN 108
LAT 58-05 N	DAY 21	NO.DPTH 7	WND-DIR 220	WW-CODE 00	
LON 79-39 W	HR 07.7	W-COLOR	WND-SPD 07	CLD-TPE	
MARSD SQ 188	C/I 1810	W-TRNSP	BARO 1020.	CLD-AMT 9	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
077	0000	0500	28067		2222	14618
077	0010	0491	28057		2222	14616
077	0019	0486	28100		2226	14616
077	0029	0287	28729		2293	14540
077	0049	0120	29572		2370	14481
077	0073	-0072	30851		2481	14414
077	0098	-0112	31278		2517	14405

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0500	28067		2222	14618	0000	00000	5622
0010	0491	28057		2222	14616	0056	00003	5621
0020	0469 B	2815 C		2232	14609	0112	00011	5529
0030	0275 B	2878 B		2297	14536	0165	00025	4901
0050	0110	2963 B		2376	14477	0256	00061	4150
0075	-0057 H	3072 I		2470	14419	0348	00119	3243
0100	-0113	3131 D		2519	14405	0424	00186	2772

C-REF-NO 359	YR 1962	DEPTH 113	WAVES 1 27XX	AIR T 03.3	VIS 8
CONS. NO 109	MONTH 9	MXSAMPD 01	WAVES 2 X0	WET B	STN 109
LAT 58-20 N	DAY 21	NO.DPTH 7	WND-DIR 270	WW-CODE 15	
LON 78-33 W	HR 12.1	W-COLOR	WND-SPD 06	CLD-TPE 6	
MARSD SQ 188	C/I 1810	W-TRNSP	BAKO 1020.	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
121	0000	0500	27274		2159	14608
121	0010	0495	27246		2157	14607
121	0020	0513	27607		2184	14621
121	0030	0227	28948		2314	14517
121	0050	-0095	30403		2446	14393
121	0075	-0141	31750		2556	14394
121	0100	-0146	32153		2588	14402

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0500	27274		2159	14608	0000	00000	6221
0010	0495	27246		2157	14607	0062	00003	6238
0020	0513	27607		2184	14621	0124	00013	5982
0030	0227	28948		2314	14517	0177	00026	4738
0050	-0095	30403		2446	14393	0260	00058	3480
0075	-0141	31750		2556	14394	0334	00104	2432
0100	-0146	32153		2588	14402	0392	00155	2119

C-REF-NO 359	YR 1962	DEPTH 124	WAVES 1 25XX	AIR T 05.0	VIS 8
CONS. NO 110	MONTH 9	MXSAMPD 01	WAVES 2 X0	WET B	STN 110
LAT 58-37 N	DAY 21	NO.DPTH 7	WND-DIR 250	W-CODE 03	
LON 78-52 W	HR 14.3	W-COLOR	WND-SPD 07	CLD-TPE 3	
MARSD SQ 188	C/I 1810	W-TRNSP	BARO 1019.	CLD-AMT 7	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
143	0000	0489	27806		2202	14610
143	0010	0483	27819		2204	14609
143	0020	0403	28895		2296	14591
143	0030		29531			
143	0050	-0106	30746		2474	14393
143	0075	-0130	31420		2529	14395
143	0100	-0143	32335		2603	14406

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0489	27806		2202	14610	0000	00000	5809
0010	0483	27819		2204	14609	0058	00003	5794
0020	0403	28895		2296	14591	0112	00011	4910
0030	0227 I	29531		2361	14525	0158	00023	4294
0050	-0106	30746		2474	14393	0234	00052	3214
0075	-0130	31420		2529	14395	0308	00099	2688
0100	-0143	32335		2603	14406	0366	00151	1980

C-REF-NO 359	YR 1962	DEPTH 102	WAVES 1 26XX	AIR T 05.6	VIS 8
CONS. NO 111	MONTH 9	MXSAMPD 01	WAVES 2 2682	WET B	STN 111
LAT 59-03 N	DAY 21	NO.DPTH 7	WND-DIR 260	WW-CODE 02	
LCN 79-18 W	HR 17.9	W-COLOR	WND-SPD 09	CLD-TPE 3	
MARSD SQ 188	C/I 1810	W-TRNSP	BARO 1018.	CLD-AMT 7	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
179	0000	0545	27252		2153	14626
179	0010	0543				
179	0020	0510	27704		2192	14621
179	0030	0388	28715		2283	14584
179	0050	-0118	30702		2470	14386
179	0075	-0148	31728		2554	14391
179	0100	-0147	32277		2598	14403

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0545	27252		2153	14626	0000	00000	6281
0010	0543	2743 I		2167	14629	0062	00003	6144
0020	0510	27704		2192	14621	0123	00012	5906
0030	0388	28715		2283	14584	0178	00026	5033
0050	-0118	30702		2470	14386	0261	00058	3245
0075	-0148	31728		2554	14391	0332	00103	2447
0100	-0147	32277		2598	14403	0389	00153	2023

C-REF-NO 359	YR 1962	DEPTH 128	WAVES 1 27XX	AIR T 05.0	VIS 7
CONS. NO 112	MONTH 9	MXSAMPD 01	WAVES 2 X0	WET B	STN 112
LAT 59-32 N	DAY 21	NO.DPTH 7	WND-DIR 270	WW-CODE 16	
LON 79-02 W	HR 21.8	W-COLOR	WND-SPD 10	CLD-TPE 7	
MARSD SQ 188	C/I 1810	W-TRNSP	BARO 1018.	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
218	0000	0556	27320		2157	14632
218	0010	0552	27371		2162	14632
218	0020	0550	27460		2169	14634
218	0030	0436	28952		2298	14608
218	0050	-0120	30882		2485	14388
218	0075	-0150	31914		2569	14392
218	0100	-0137	32541		2619	14411

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0556	27320		2157	14632	0000	00000	6240
0010	0552	27371		2162	14632	0062	00003	6198
0020	0550	27460		2169	14634	0124	00013	6129
0030	0436	28952		2298	14608	0179	00026	4896
0050	-0120	30882		2485	14388	0260	00057	3106
0075	-0150	31914		2569	14392	0328	00100	2304
0100	-0137	32541		2619	14411	0380	00145	1823

C-REF-NO 359 YR 1962 DEPTH 128 WAVES 1 33XX AIR T 03.3 VIS 8
 CONS. NO 113 MONTH 9 MXSAMPD 01 WAVES 2 X0 WET B STN 113
 LAT 60-00 N DAY 22 NO.DPTH 7 WND-DIR 330 WW-CODE 15
 LON 79-02 W HR 00.8 W-COLOR WND-SPD 12 CLD-TPE 7
 MARSD SQ 224 C/I 1810 W-TRNSP BARO 1019. CLD-AMT 7 HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
008	0000	0550	27240		2152	14628
008	0010	0548	27234		2151	14629
008	0019	0552	27263		2153	14632
008	0029	0188	29346		2348	14505
008	0048	-0148	31314		2520	14380
008	0073	-0141	32191		2591	14400
008	0097	-0124	32706		2632	14419

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0550	27240		2152	14628	0000	00000	6295
0010	0548	27234		2151	14629	0063	00003	6297
0020	0521 D	2744 I		2170	14622	0125	00013	6117
0030	0161	2950 C		2362	14495	0177	00026	4281
0050	-0157 C	3143 E		2530	14378	0247	00053	2679

C-REF-NO 359	YR 1962	DEPTH 95	WAVES 1 32XX	AIR T 01.7	VIS 8
CONS. NO 114	MONTH 9	MXSAMPD 01	WAVES 2 3282	WET B	STN 114
LAT 60-43 N	DAY 22	NO.DPTH 6	WND-DIR 320	WW-CODE 00	
LON 78-47 W	HR 05.5	W-COLOR	WND-SPD 08	CLD-TPE	
MARSD SQ 224	C/I 1810	W-TRNSP	BARO 1020.	CLD-AMT 9	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
055	0000	0506	27214		2154	14609
055	0009	0203	29018		2321	14504
055	0018	-0062	30727		2471	14408
055	0027	-0086	30929		2488	14401
055	0046	-0139	31602		2544	14388
055	0068	-0129	32357		2604	14407

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0506	27214		2154	14609	0000	00000	6272
0010	0167 B	2925 F		2342	14491	0054	00002	4474
0020	-0078 D	3083 I		2480	14402	0092	00008	3157
0030	-0096	3103 B		2496	14398	0123	00016	3004
0050	-0133 C	3168 I		2550	14393	0178	00038	2489

C-REF-NO 359	YR 1962	DEPTH 155	WAVES 1 29XX	AIR T 01.7	VIS 8
CONS. NO 115	MONTH 9	MXSAMPD 01	WAVES 2 XO	WET B	STN 115
LAT 60-43 N	DAY 22	NO.DPTH 8	WND-DIR 290	WW-CODE 00	
LON 79-24 W	HR 07.4	W-COLOR	WND-SPD 08	CLD-TPE	
MARSD SQ 224	C/I 1810	W-TRNSP	BARO 1020.	CLD-AMT 9	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
074	0000	0467	27360		2169	14595
074	0009	0463	27454		2177	14596
074	0019	0463	27472		2178	14598
074	0028	0371	28274		2250	14571
074	0047	-0060	30824		2479	14415
074	0071	-0131	31980		2574	14402
074	0093	-0122	32570		2621	14418
074	0140	-0112	32838		2643	14434

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0467	27360		2169	14595	0000	00000	6126
0010	0465	2744 D		2175	14597	0061	00003	6067
0020	0457	2754 B		2184	14596	0122	00012	5984
0030	0325 E	2855 I		2275	14555	0177	00026	5109
0050	-0086 D	3105 H		2497	14406	0259	00057	2989
0075	-0132	32115		2585	14404	0323	00097	2154
0100	-0144 F	3275 G		2636	14411	0371	00140	1664
0125	-0134 D	3294 D		2652	14423	0411	00186	1516

C-REF-NO 359	YR 1962	DEPTH 161	WAVES 1 21XX	AIR T 03.9	VIS 8
CONS. NO 116	MONTH 9	MXSAMPD 01	WAVES 2 X0	WET B	STN 116
LAT 60-00 N	DAY 22	NO.DPTH 8	WND-DIR 210	WW-CODE 02	
LON 82-00 W	HR 17.4	W-COLOR	WND-SPD 09	CLD-TPE 6	
MARSD SQ 225	C/I 1810	W-TRNSP	BARO 1018.	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
174	0000	0433	29210		2319	14605
174	0010	0425	29243		2322	14604
174	0020	0427	29235		2321	14606
174	0030	-0016	30754		2471	14432
174	0050	-0140	31954		2572	14394
174	0075	-0132	32594		2624	14410
174	0100	-0136	32941		2652	14418
174	0150	-0147	33186		2672	14424

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0433	29210		2319	14605	0000	00000	4697
0010	0425	29243		2322	14604	0047	00002	4665
0020	0427	29235		2321	14606	0094	00010	4673
0030	-0016	30754		2471	14432	0134	00019	3237
0050	-0140	31954		2572	14393	0189	00041	2277
0075	-0132	32594		2624	14410	0240	00073	1786
0100	-0136	32941		2652	14417	0282	00110	1517
0125	-0138	3318 E		2671	14424	0318	00151	1329
0150	-0147	33186		2672	14424	0351	00198	1323

C-REF-NO 359	YR 1962	DEPTH 137	WAVES 1 22XX	AIR T 06.1	VIS 8
CONS. NO 117	MONTH 9	MXSAMPD 01	WAVES 2 2742	WET B	STN 117
LAT 60-00 N	DAY 22	NO.DPTH 7	WND-DIR 210	WW-CODE 02	
LON 84-00 W	HR 23.8	W-COLOR	WND-SPD 14	CLD-TPE 6	
MARSD SQ 225	C/I 1810	W-TRNSP	BARO 1008.	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
238	0000	0400	30104		2392	14603
238	0009	0394	30074		2391	14601
238	0018	0396	30072		2390	14604
238	0027	0364	30403		2419	14596
238	0045	-0147	32325		2602	14395
238	0067	-0141	32911		2649	14409
238	0090	-0144	33046		2661	14414

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0400	30104		2392	14603	0000	00000	3992
0010	0395	3007 B		2390	14602	0040	00002	4018
0020	0397 B	30113		2393	14605	0080	00008	3983
0030	0283 I	3071 I		2450	14566	0118	00018	3439
0050	-0176 I	3256 I		2622	14385	0170	00038	1802

C-REF-NO 359	YR 1962	DEPTH 194	WAVES 1 25XX	AIR T 06.1	VIS 8
CONS. NO 118	MONTH 9	MXSAMPD 01	WAVES 2 2586	WET B	STN 118
LAT 60-00 N	DAY 23	NO.DPTH 8	WND-DIR 250	WW-CODE 02	
LON 86-00 W	HR 06.4	W-COLOR	WND-SPD 21	CLD-TPE	
MARSD SQ 225	C/I 1810	W-TRNSP	BARO 998.	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
064	0000	0389	30610		2433	14605
064	0009	0384	31091		2472	14611
064	0017	0385	31087		2472	14612
064	0026	0384				
064	0043	-0161	32455		2613	14389
064	0065	-0167	32589		2624	14392
064	0087	-0129	32918		2650	14418
064	0127	-0142	33126		2667	14422

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0389	30610		2433	14605	0000	00000	3600
0010	0384	3110 C		2472	14611	0034	00002	3229
0020	0396 D	3122 I		2482	14619	0066	00007	3143
0030	0267 I	3172 I		2532	14572	0096	00014	2661
0075	-0150 B	3274 D		2636	14404	0184	00059	1672
0100	-0145 E	3294 I		2652	14413	0225	00095	1519
0125	-0142	3311 B		2666	14421	0261	00137	1382

C-REF-NO 359 YR 1962 DEPTH 188 WAVES 1 29XX AIR T 05.6 VIS 7
 CONS. NO 119 MONTH 9 MXSAMPD 01 WAVES 2 2546 WET B STN 119
 LAT 60-00 N DAY 23 NO.DPTH 8 WND-DIR 290 WW-CODE 10
 LON 88-00 W HR 15.4 W-COLOR WND-SPD 11 CLD-TPE 7
 MARSD SQ 225 C/I 1810 W-TRNSP BARO 1000. CLD-AMT 8 HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
154	0000	0400	30470		2421	14608
154	0010	0391	30503		2425	14606
154	0019	0393	30497		2424	14608
154	0028	-0010	31595		2539	14446
154	0048	-0147	32552		2621	14398
154	0069	-0115	32932		2650	14422
154	0097	-0112	33030		2658	14430
154	0147	-0128	33178		2671	14432

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0400	30470		2421	14608	0000	00000	3716
0010	0391	30503		2425	14606	0037	00002	3683
0020	0353 E	3060 F		2436	14593	0074	00007	3576
0030	-0051 G	3175 F		2553	14429	0104	00015	2462
0050	-0147 B	3261 B		2625	14399	0147	00032	1774
0075	-0112	3297 C		2654	14425	0188	00058	1501
0100	-0103 C	3315 I		2668	14436	0224	00090	1368
0125	-0109 B	3323 I		2674	14438	0258	00129	1306
*0150	-0132	3316 B		2670	14431	0291	00176	1345

C-REF-NO 359	YR 1962	DEPTH 155	WAVES 1 30XX	AIR T 05.6	VIS 8
CONS. NO 120	MONTH 9	MXSAMPD 01	WAVES 2 3046	WET B	STN 120
LAT 60-00 N	DAY 23	NO.DPTH 8	WND-DIR 300	WW-CODE 01	
LON 89-36 W	HR 20.9	W-COLOR	WND-SPD 11	CLD-TPE 6	
MARSD SQ 225	C/I 1810	W-TRNSP	BARO 1003.	CLD-AMT 6	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
209	0000	0450	31010		2459	14636
209	0009	0447	31055		2463	14637
209	0018	0448	31050		2463	14639
209	0027		31243			
209	0045	-0146	32588		2623	14399
209	0068	-0161	32751		2637	14398
209	0091	-0132	32938		2651	14418
209	0136	-0126	33060		2661	14430

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0450	31010		2459	14636	0000	00000	3354
0010	0449	31051		2463	14638	0034	00002	3324
0020	0409 I	31071		2468	14623	0067	00007	3271
0030	0201 I	3146 I		2516	14539	0097	00015	2812
0050	-0170 F	3270 I		2633	14390	0143	00032	1700
0075	-0154	32811		2642	14403	0184	00059	1614
0100	-0145 E	3295 D		2653	14414	0224	00094	1504
0125	-0133 B	3304 B		2660	14424	0261	00136	1441

C-REF-NO 359	YR 1962	DEPTH 117	WAVES 1 32XX	AIR T 05.0	VIS 8
CONS. NO 121	MONTH 9	MXSAMPD 01	WAVES 2 3082	WET B	STN 121
LAT 60-26 N	DAY 24	NO.DPTH 7	WND-DIR 320	WW-CODE 14	
LON 89-36 W	HR 00.3	W-COLOR	WND-SPD 13	CLD-TPE 6	
MARSD SQ 225	C/I 1810	W-TRNSP	BARO 1006.	CLD-AMT 7	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
003	0000	0433	31200		2476	14631
003	0010	0416	31189		2477	14626
003	0019	0417	31176		2476	14627
003	0029	0413	31175		2476	14627
003	0047	-0141	32635		2627	14402
003	0070	-0158	32806		2641	14400
003	0094	-0149	32931		2651	14410

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0433	31200		2476	14631	0000	00000	3195
0010	0416	31189		2477	14626	0032	00002	3188
0020	0422 B	3116 B		2474	14629	0064	00007	3214
0030	0385 E	3125 G		2484	14617	0096	00015	3117
0050	-0166 G	3271 I		2634	14392	0144	00033	1689

C-REF-NO 359	YR 1962	DEPTH 132	WAVES 1 29XX	AIR T 05.0	VIS 8
CONS. NO 122	MONTH 9	MXSAMPD 01	WAVES 2 2946	WET B	STN 122
LAT 60-30 N	DAY 24	NO.DPTH 7	WNC-DIR 290	WW-CODE 02	
LON 91-30 W	HR 06.3	W-COLOR	WND-SPD 10	CLD-TPE 3	
MARSD SQ 226	C/I 1810	W-TRNSP	BARO 1010.	CLD-AMT 2	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
063	0000	0439	31410		2492	14637
063	0009	0440	31454		2495	14639
063	0018	0442	31456		2495	14642
063	0027	0441	31451		2495	14643
063	0045	-0060	32569		2619	14439
063	0068	-0157	32879		2647	14401
063	0091	-0160	32989		2656	14405

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0439	31410		2492	14637	0000	00000	3042
0010	0440	31455		2496	14640	0030	00002	3010
0020	0449 C	3144 C		2493	14645	0061	00006	3031
0030	0368 I	3161 I		2515	14614	0090	00014	2826
0050	-0111 G	3270 H		2631	14418	0136	00031	1714

-REF-NO 359 YR 1962 DEPTH 139 WAVES 1 30XX AIR T 03.9 VIS 7
 ONS. NO 123 MONTH 9 MXSAMPD 01 WAVES 2 3482 WET B STN 123
 AT 61-00 N DAY 24 NO.DPTH 7 WND-DIR 320 WW-CODE 25
 ON 90-00 W HR 11.9 W-COLOR WND-SPD 09 CLD-TPE 3
 ARSD SQ 226 C/I 1810 W-TRNSP BARO 1011. CLD-AMT 7 HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
119	0000	0433	31130		2470	14631
119	0009	0400	31155		2476	14618
119	0018	0402	31144		2475	14621
119	0027	-0101	32126		2585	14411
119	0045	-0147	32875		2647	14402
119	0068	-0142	33006		2657	14410
119	0091	-0158	33103		2665	14408

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0433	31130		2470	14631	0000	00000	3248
0010	0412 E	3113 D		2473	14623	0033	00002	3229
0020	0298 I	3134 I		2499	14579	0064	00006	2976
0030	-0155 I	3233 F		2603	14389	0089	00013	1989
0050	-0148 B	3294 F		2652	14404	0124	00027	1515
0075	-0159 D	3318 I		2672	14406	0160	00049	1328

C-REF-NO 359	YR 1962	DEPTH 186	WAVES 1 34XX	AIR T 05.0	VIS 7
CONS. NO 124	MONTH 9	MXSAMPD 01	WAVES 2 3446	WET B	STN 124
LAT 61-00 N	DAY 24	NO.DPTH 8	WND-DIR	WW-CODE 10	
LON 88-00 W	HR 18.0	W-COLOR	WND-SPD 07	CLD-TPE 7	
MARSD SQ 225	C/I 1810	W-TRNSP	BARO 1012.	CLD-AMT 7	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
180	0000	0411	30680		2437	14615
180	0010	0398	30733		2442	14612
180	0019	0399	30724		2442	14614
180	0029	-0094	31834		2561	14410
180	0047	-0140	32613		2625	14402
180	0070	-0102	32974		2653	14429
180	0094	-0092	33061		2660	14439
180	0141	-0101	33171		2669	14444

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0411	30680		2437	14615	0000	00000	3567
0010	0398	30733		2442	14612	0036	00002	3516
0020	0354 F	3082 F		2453	14596	0070	00007	3413
0030	-0112 E	3190 C		2567	14403	0099	00014	2325
0050	-0137 B	3269 B		2631	14405	0140	00030	1714
0075	-0098	3301 B		2656	14432	0180	00056	1481
0100	-0085 B	3316 I		2668	14444	0216	00088	1366
0125	-0089	3321 F		2672	14448	0250	00127	1325

C-REF-NO 359	YR 1962	DEPTH 230	WAVES 1 34XX	AIR T 03.9	VIS 8
CONS. NO 125	MONTH 9	MXSAMPD 02	WAVES 2 3446	WET B	STN 125
LAT 61-00 N	DAY 25	NO.DPTH 9	WND-DIR	WW-CODE 01	
LON 86-00 W	HR 00.6	W-COLOR	WND-SPD 08	CLD-TPE 7	
MARSD SQ 225	C/I 1810	W-TRNSP	BARO 1015.	CLD-AMT 7	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
006	0000	0411	30280		2405	14610
006	0010	0397	30309		2409	14606
006	0019	0398	30302		2408	14608
006	0029	-0078	31807		2558	14417
006	0048	-0154	32220		2594	14390
006	0072	-0123	32943		2652	14419
006	0096	-0119	33048		2660	14426
006	0145	-0138	33194		2672	14428
006	0193	-0153	33269		2679	14429

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0411	30280		2405	14610	0000	00000	3869
0010	0397	30309		2409	14606	0039	00002	3835
0020	0355 F	3044 I		2423	14591	0077	00008	3703
0030	-0097 D	3187 G		2564	14409	0107	00015	2357
0050	-0154	3229 C		2599	14392	0151	00033	2018
0075	-0122	3297 C		2654	14421	0195	00060	1498
0100	-0120	33063		2661	14427	0232	00093	1428
0125	-0128	33144		2668	14428	0267	00134	1362
0150	-0134 B	33208		2673	14431	0301	00181	1310
0175	-0144	33251		2677	14431	0334	00235	1272

C-REF-NO 359	YR 1962	DEPTH 201	WAVES 1 32XX	AIR T 01.7	VIS 6
CONS. NO 126	MONTH 9	MXSAMPD 02	WAVES 2 X0	WET B	STN 126
LAT 61-00 N	DAY 25	NO.DPTH 9	WND-DIR 320	WW-CODE 85	
LON 84-00 W	HR 08.0	W-COLOR	WND-SPD 03	CLD-TPE	
MARSD SQ 225	C/I 1810	W-TRNSP	BARO 1015.	CLD-AMT 9	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
080	0000	0389	29750		2365	14593
080	0010	0384	29752		2366	14593
080	0020	0387	29753		2366	14596
080	0030	-0094	31551		2538	14406
080	0050	-0143	32199		2592	14396
080	0075	-0123	32895		2648	14419
080	0100	-0095	33042		2659	14438
080	0150	-0104	33153		2668	14444
080	0200	-0140	33218		2674	14436

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0389	29750		2365	14593	0000	00000	4251
0010	0384	29752		2366	14593	0043	00002	4245
0020	0387	29753		2366	14596	0085	00009	4247
0030	-0094	31551		2538	14406	0120	00017	2600
0050	-0143	32199		2592	14396	0167	00036	2088
0075	-0123	32895		2648	14419	0213	00064	1558
0100	-0095	33042		2659	14438	0251	00098	1453
0125	-0092 B	3312 B		2665	14445	0287	00140	1396
0150	-0104	33153		2668	14444	0321	00189	1362
0175	-0111 B	3322 C		2673	14445	0355	00245	1310
0200	-0140	33218		2674	14436	0388	00308	1297

C-REF-NO 359	YR 1962	DEPTH 176	WAVES 1 36XX	AIR T 02.2	VIS 7
CONS. NO 127	MONTH 9	MXSAMPD 01	WAVES 2 0182	WET B	STN 127
LAT 61-00 N	DAY 25	NO.DPTH 8	WND-DIR 360	WW-CODE 03	
LON 82-00 W	HR 14.4	W-COLOR	WND-SPD 06	CLD-TPE 6	
MARSD SQ 225	C/I 1810	W-TRNSP	BARO 1016.	CLD-AMT 7	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
144	0000	0394	29390		2336	14591
144	0010	0331	29408		2343	14565
144	0020	0333	29402		2342	14568
144	0030	-0120	31325		2521	14391
144	0050	-0137	32142		2587	14398
144	0075	-0124	32731		2634	14416
144	0100	-0117	32958		2653	14427
144	0150	-0110	33163		2669	14441

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0394	29390		2336	14591	0000	00000	4527
0010	0331	29408		2343	14565	0045	00002	4462
0020	0333	29402		2342	14568	0090	00009	4469
0030	-0120	31325		2521	14391	0126	00018	2767
0050	-0137	32142		2587	14398	0176	00038	2134
0075	-0124	32731		2634	14416	0224	00068	1683
0100	-0117	32958		2653	14427	0264	00103	1510
0125	-0111	3319 I		2671	14437	0300	00144	1333
0150	-0110	33163		2669	14441	0334	00192	1352

C-REF-NO 359	YR 1962	DEPTH 93	WAVES 1 34XX	AIR T 02.2	VIS 8
CONS. NO 128	MONTH 9	MXSAMPD 01	WAVES 2 3482	WET B	STN 128
LAT 61-26 N	DAY 25	NO.DPTH 6	WND-DIR 340	WW-CODE 02	
LON 80-47 W	HR 19.4	W-COLOR	WND-SPD 10	CLD-TPE 6	
MARSD SQ 225	C/I 1810	W-TRNSP	BARO 1016.	CLD-AMT 7	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
194	0000	0378	28940		2302	14578
194	0010	0361	28996		2308	14573
194	0020	0320	29389		2342	14562
194	0030	-0091	30862		2483	14398
194	0050	-0130	31811		2560	14396
194	0075	-0109	32755		2636	14423

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0378	28940		2302	14578	0000	00000	4854
0010	0361	28996		2308	14573	0048	00002	4798
0020	0320	29389		2342	14562	0095	00010	4468
0030	-0091	30862		2483	14398	0133	00019	3130
0050	-0130	31811		2560	14396	0189	00041	2390
0075	-0109	32755		2636	14423	0240	00072	1669

C-REF-NO 359	YR 1962	DEPTH 135	WAVES 1 33XX	AIR T 02.2	VIS 8
CONS. NO 129	MONTH 9	MXSAMPD 01	WAVES 2 3382	WET B	STN 129
LAT 60-58 N	DAY 25	NO.DPTH 8	WND-DIR 330	WW-CODE 02	
LON 80-00 W	HR 23.6	W-COLOR	WND-SPD 10	CLD-TPE 6	
MARKSD SQ 225	C/I 1810	W-TRNSP	BARO 1017.	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
236	0000	0444	27860		2211	14592
236	0010	0427	27945		2219	14587
236	0020	0400	28791		2288	14589
236	0030	-0113	30949		2490	14389
236	0050	-0136	31872		2565	14394
236	0075	-0112	32573		2621	14420
236	0100	-0110	32836		2643	14428
236	0125	-0108	32895		2647	14434

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0444	27860		2211	14592	0000	00000	5728
0010	0427	27945		2219	14587	0057	00003	5649
0020	0400	28791		2288	14589	0110	00011	4986
0030	-0113	30949		2490	14389	0151	00021	3058
0050	-0136	31872		2565	14394	0205	00042	2341
0075	-0112	32573		2621	14419	0257	00075	1808
0100	-0110	32836		2643	14428	0300	00113	1605
0125	-0108	32895		2647	14434	0340	00159	1559

C-REF-NO 359	YR 1962	DEPTH 124	WAVES 1 36XX	AIR T 01.1	VIS 8
CONS. NO 130	MONTH 9	MXSAMPD 01	WAVES 2 XO	WET B	STN 130
LAT 61-31 N	DAY 26	NO.DPTH 7	WND-DIR 360	WW-CODE 00	
LON 79-30 W	HR 04.5	W-COLOR	WND-SPD 09	CLD-TPE	
MARSD SQ 224	C/I 1810	W-TRNSP	BARO 1018.	CLD-AMT 9	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
045	0000	0428	27760		2204	14584
045	0010	0408	27821		2211	14577
045	0020	0360	28904		2301	14573
045	0030	-0114	30583		2461	14383
045	0050	-0125	31576		2541	14395
045	0075	-0108	32650		2627	14422
045	0100	-0105				

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0428	27760		2204	14584	0000	00000	5790
0010	0408	27821		2211	14577	0058	00003	5727
0020	0360	28904		2301	14573	0111	00011	4867
0030	-0114	30583		2461	14383	0152	00021	3339
0050	-0125	31576		2541	14395	0212	00045	2571
0075	-0108	32650		2627	14422	0266	00078	1750
0100	-0105							

C-REF-NO 359	YR 1962	DEPTH 73	WAVES 1 36XX	AIR T 00.6	VIS 8
CONS. NO 131	MONTH 9	MXSAMPD 01	WAVES 2 XO	WET B	STN 131
LAT 61-25 N	DAY 26	NO.DPTH 6	WND-DIR 360	WW-CODE 00	
LON 78-10 W	HR 09.3	W-COLOR	WND-SPD 09	CLD-TPE	
MARSD SQ 224	C/I 1810	W-TRNSP	BARO 1018.	CLD-AMT	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
093	0000	0490	27480		2176	14606
093	0010	0461	27503		2181	14596
093	0020	0445	27762		2203	14594
093	0030	0206	29130		2330	14510
093	0050	-0138	31180		2509	14384
093	0070	-0124	31769		2557	14402

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0490	27480		2176	14606	0000	00000	6056
0010	0461	27503		2181	14596	0060	00003	6013
0020	0445	27762		2203	14594	0120	00012	5803
0030	0206	29130		2330	14510	0172	00025	4586
0050	-0138	31180		2509	14384	0247	00054	2873

C-REF-NO 359	YR 1962	DEPTH 53	WAVES 1 36XX	AIR T 00.0	VIS 7
CONS. NO 132	MONTH 9	MXSAMPD 00	WAVES 2 X0	WET B	STN 132
LAT 62-00 N	DAY 26	NO.DPTH 5	WND-DIR 360	WW-CODE 01	
LON 78-18 W	HR 13.3	W-COLOR	WND-SPD 09	CLD-TPE 9	
MARSD SQ 224	C/I 1810	W-TRNSP	BARO 1020.	CLD-AMT 7	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
133	0000	0317	28020		2234	14539
133	0010	0309	28049		2237	14538
133	0020	0267	28588		2283	14528
133	0030	-0070	30394		2444	14401
133	0050	-0103	31082		2501	14399

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0317	28020		2234	14539	0000	00000	5505
0010	0309	28049		2237	14538	0055	00003	5477
0020	0267	28588		2283	14528	0108	00011	5038
0030	-0070	30394		2444	14401	0151	00021	3496
0050	-0103	31082		2501	14399	0216	00047	2956

C-REF-NO 359	YR 1962	DEPTH 181	WAVES 1 29XX	AIR T 00.6	VIS 8
CONS. NO 133	MONTH 9	MXSAMPD 01	WAVES 2 XO	WET B	STN 133
LAT 62-00 N	DAY 26	NO.DPTH 8	WND-DIR 290	WW-CODE 03	
LON 78-40 W	HR 14.8	W-COLOR	WND-SPD 07	CLD-TPE 8	
MARSD SQ 224	C/I 1810	W-TRNSP	BARO 1020.	CLD-AMT 7	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
148	0000	0328	28190		2247	14546
148	0010	0312	28197		2248	14541
148	0019	0290	28370		2264	14535
148	0029		29721			
148	0048	-0109	31187		2509	14397
148	0072	-0110	31908		2568	14411
148	0096	-0111	32647		2627	14424
148	0145	-0106	32849		2643	14438

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0328	28190		2247	14546	0000	00000	5384
0010	0312	28197		2248	14541	0054	00003	5367
0020	0277 C	2849 F		2274	14531	0107	00011	5122
0030	0143 I	2983 B		2389	14491	0152	00022	4019
0050	-0115 B	3127 D		2516	14396	0221	00049	2808
0075	-0110	3201 B		2576	14412	0285	00089	2239
0100	-0110	3260 I		2624	14425	0335	00133	1784
0125	-0109	3285 I		2644	14433	0378	00182	1593

C-REF-NO 359	YR 1962	DEPTH 135	WAVES 1 32XX	AIR T 00.0	VIS 8
CONS. NO 134	MONTH 9	MXSAMPD 01	WAVES 2 XO	WET B	STN 134
LAT 62-00 N	DAY 26	NO.DPTH 7	WND-DIR 320	WW-CODE 03	
LON 79-02 W	HR 16.4	W-COLOR	WND-SPD 07	CLD-TPE 6	
MARSD SQ 224	C/I 1810	W-TRNSP	BARO 1021.	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
164	0000	0389	27650		2199	14565
164	0010	0387	27669		2201	14566
164	0020	0391	27671		2200	14570
164	0030		29973			
164	0050	-0104	32064		2580	14412
164	0075	-0081	32707		2631	14436
164	0100	-0091	33057		2660	14440

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0389	27650		2199	14565	0000	00000	5841
0010	0387	27669		2201	14566	0058	00003	5825
0020	0391	27671		2200	14570	0117	00012	5826
0030	0237 I	29973		2395	14535	0166	00024	3965
0050	-0104	32064		2580	14412	0228	00048	2202
0075	-0081	32707		2631	14436	0277	00078	1715
0100	-0091	33057		2660	14440	0317	00114	1442

C-REF-NO 359	YR 1962	DEPTH 99	WAVES 1 32XX	AIR T 00.0	VIS 8
CONS. NO 135	MONTH 9	MXSAMPD 01	WAVES 2 3242	WET B	STN 135
LAT 62-00 N	DAY 26	NO.DPTH 7	WND-DIR 320	WW-CODE 02	
LON 79-15 W	HR 17.4	W-COLOR	WND-SPD 08	CLD-TPE 6	
MARSD SQ 224	C/I 1810	W-TRNSP	BARO 1021.	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
174	0000	0378	27690		2203	14561
174	0010	0374	27831		2214	14563
174	0020		28396			
174	0030	0051	30375		2438	14457
174	0050	-0044	31326		2518	14430
174	0075	-0097	32495		2615	14425
174	0095	-0096	32811		2640	14434

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0378	27690		2203	14561	0000	00000	5802
0010	0374	27831		2214	14563	0058	00003	5692
0020	0225 I	28396		2270	14507	0112	00011	5157
0030	0051	30375		2438	14457	0156	00022	3554
0050	-0044	31326		2518	14430	0220	00047	2787
0075	-0097	32495		2615	14425	0278	00083	1872

C-REF-NO 359	YR 1962	DEPTH 154	WAVES 1 33XX	AIR T 00.0	VIS 8
CONS. NO 136	MONTH 9	MXSAMPD 01	WAVES 2 3382	WET B	STN 136
LAT 62-16 N	DAY 26	NO.DPTH 8	WND-DIR 330	WW-CODE 02	
LON 79-02 W	HR 19.9	W-COLOR	WND-SPD 09	CLD-TPE 6	
MARSD SQ 224	C/I 1810	W-TRNSP	BARO 1022.	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
199	0000	0300	28090		2241	14533
199	0010	0318	28153		2244	14543
199	0020	0317	28167		2246	14544
199	0030	0287	28670		2288	14540
199	0050	-0094	30976		2492	14402
199	0075	-0102	32492		2615	14423
199	0100	-0101	32819		2641	14432
199	0150	-0081	33151		2667	14455

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0300	28090		2241	14533	0000	00000	5440
0010	0318	28153		2244	14543	0054	00003	5405
0020	0317	28167		2246	14544	0109	00011	5393
0030	0287	28670		2288	14540	0161	00024	4990
0050	-0094	30976		2492	14401	0241	00055	3040
0075	-0102	32492		2615	14423	0303	00093	1873
0100	-0101	32819		2641	14432	0347	00132	1621
0125	-0095	3338 I		2686	14447	0383	00172	1195
0150	-0081	33151		2667	14454	0415	00218	1372

C-REF-NO 359	YR 1962	DEPTH 313	WAVES 1 32XX	AIR T 00.0	VIS 8
CONS. NO 137	MONTH 9	MXSAMPD 03	WAVES 2 X0	WET B	STN 137
LAT 62-38 N	DAY 26	NO.DPTH 10	WND-DIR 320	WW-CODE 02	
LON 79-36 W	HR 23.6	W-COLOR	WND-SPD 09	CLD-TPE 3	
MARSD SQ 224	C/I 1810	W-TRNSP	BARO 1023.	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
236	0000	0272	29730		2373	14542
236	0010	0273	29778		2377	14545
236	0020		30647			
236	0030	-0029	31271		2514	14433
236	0050	-0046	32433		2608	14444
236	0075	-0087	32805		2639	14434
236	0100	-0095	32978		2654	14437
236	0150	-0091				
236	0200	-0091				
236	0300	-0098	33342		2683	14474

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0272	29730		2373	14542	0000	00000	4174
0010	0273	29778		2377	14545	0042	00002	4139
0020	0130 I	30647		2456	14495	0080	00008	3386
0030	-0029	31271		2514	14433	0111	00016	2836
0050	-0046	32433		2608	14444	0159	00034	1939
0075	-0087	32805		2639	14434	0204	00063	1638
0100	-0095	32978		2654	14437	0243	00098	1502
0125	-0094	3327 I		2677	14446	0278	00138	1275
0150	-0091	3344 I		2691	14454	0309	00181	1144
0175	-0091	3356 I		2701	14460	0337	00227	1053
0200	-0091	3363 I		2706	14465	0363	00277	1003
0225	-0091	3364 I		2707	14469	0388	00332	0994
0250	-0093	3359 I		2703	14472	0413	00394	1026
0300	-0098	33342		2683	14474	0470	00554	1211

C-REF-NO 359	YR 1962	DEPTH 267	WAVES 1 32XX	AIR T -01.1	VIS 8
CONS. NO 138	MONTH 9	MXSAMPD 02	WAVES 2 X0	WET B	STN 138
LAT 63-04 N	DAY 27	NO.DPTH 10	WND-DIR 320	WW-CODE 00	
LON 80-00 W	HR 03.2	W-COLOR	WND-SPD 07	CLD-TPE	
MARSD SQ 225	C/I 1810	W-TRNSP	BARO 1023.	CLD-AMT 9	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
032	0000	0167	30840		2469	14511
032	0010	0155	31296		2506	14514
032	0020	0143	30934		2478	14505
032	0030	0014	31896		2562	14461
032	0050	-0052	32652		2626	14445
032	0075	-0089	32883		2646	14435
032	0100	-0128	32978		2655	14422
032	0150	-0133	33061		2661	14429
032	0200	-0103	33192		2671	14453
032	0250	-0134	33287		2680	14448

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0167	30840		2469	14511	0000	00000	3262
0010	0155	31296		2506	14514	0031	00001	2907
0020	0143	30934		2478	14505	0062	00006	3175
0030	0014	31896		2562	14461	0090	00013	2375
0050	-0052	32652		2626	14445	0131	00030	1769
0075	-0089	32883		2646	14435	0173	00056	1578
0100	-0128	32978		2655	14422	0212	00091	1491
0125	-0139 B	3303 B		2659	14422	0249	00134	1450
0150	-0133	33061		2661	14429	0285	00185	1423
0175	-0116 B	33126		2666	14442	0321	00243	1377
0200	-0103	33192		2671	14453	0355	00309	1329
0225	-0125 C	3323 B		2675	14447	0388	00381	1290
0250	-0134	33287		2680	14448	0420	00459	1243

C-REF-NO 359 YR 1962 DEPTH 73 WAVES 1 22XX AIR T -00.6 VIS 8
 CONS. NO 139 MONTH 9 MXSAMPD 01 WAVES 2 2242 WET B STN 139
 LAT 63-04 N DAY 27 NO.DPTH 6 WND-DIR 220 WW-CODE
 LON 78-00 W HR 09.2 W-COLOR WND-SPD 08 CLD-TPE
 MARSD SQ 224 C/I 1810 W-TRNSP BARO 1024. CLD-AMT 9 HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
092	0000	0083	31820		2552	14487
092	0010	0074	31900		2559	14485
092	0019	0071	31983		2566	14487
092	0028	0050	32434		2604	14485
092	0048	0033	32656		2622	14483
092	0069	0030	32739		2629	14487

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0083	31820		2552	14487	0000	00000	2467
0010	0074	31900		2559	14485	0024	00001	2402
0020	0069	3203 C		2570	14486	0048	00005	2300
0030	0047	3248 D		2608	14484	0069	00010	1942
0050	0028 B	3282 I		2635	14484	0106	00025	1678

C-REF-NO 359	YR 1962	DEPTH 174	WAVES 1 22XX	AIR T -00.6	VIS 8
CONS. NO 140	MONTH 9	MXSAMPD 01	WAVES 2 2242	WET B	STN 140
LAT 62-58 N	DAY 27	NO.DPTH 8	WND-DIR 220	WW-CODE	
LON 78-00 W	HR 10.3	W-COLOR	WND-SPD 09	CLD-TPE	
MARSD SQ 224	C/I 1810	W-TRNSP	BARO 1022.	CLD-AMT 9	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
103	0000	0189	29870		2390	14508
103	0010	0184	29882		2391	14507
103	0020	0005	31588		2538	14451
103	0030	0002	32028		2573	14458
103	0050	0054	32746		2628	14495
103	0075	0001	32985		2650	14478
103	0100	-0012	33065		2657	14477
103	0150	-0013	33070		2658	14485

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0189	29870		2390	14508	0000	00000	4013
0010	0184	29882		2391	14507	0040	00002	4001
0020	0005	31588		2538	14451	0073	00007	2607
0030	0002	32028		2573	14457	0098	00013	2269
0050	0054	32746		2628	14495	0138	00029	1745
0075	0001	32985		2650	14478	0180	00055	1536
0100	-0012	33065		2657	14477	0218	00089	1468
0125	-0027 B	3313 C		2663	14475	0254	00131	1414
0150	-0013	33070		2658	14485	0290	00182	1462

C-REF-NO 359	YR 1962	DEPTH 459	WAVES 1 22XX	AIR T 01.1	VIS 8
CONS. NO 141	MONTH 9	MXSAMPD 04	WAVES 2 2482	WET B	STN 141
LAT 62-46 N	DAY 27	NO.DPTH 11	WND-DIR 220	WW-CODE 02	
LON 78-00 W	HR 12.7	W-COLOR	WND-SPD 14	CLD-TPE 3	
MARSD SQ 224	C/I 1810	W-TRNSP	BARO 1021.	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
127	0000	0239	30300		2421	14536
127	0010	0216	30439		2434	14529
127	0020	0202	30575		2446	14526
127	0030	0087	31349		2514	14487
127	0050	-0052	32348		2601	14440
127	0075	-0068	32750		2634	14443
127	0100	-0074	32956		2651	14447
127	0150	-0051	33106		2662	14468
127	0200	-0059	33161		2667	14473
127	0300	-0075	33276		2677	14484
127	0400	-0094	33334		2682	14492

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0239	30300		2421	14536	0000	00000	3719
0010	0216	30439		2434	14529	0037	00002	3597
0020	0202	30575		2446	14526	0072	00007	3485
0030	0087	31349		2514	14487	0104	00015	2828
0050	-0052	32348		2601	14440	0153	00034	2002
0075	-0068	32750		2634	14443	0199	00064	1687
0100	-0074	32956		2651	14447	0240	00100	1526
0125	-0063 B	3306 C		2659	14457	0277	00143	1450
0150	-0051	33106		2662	14468	0313	00194	1418
0175	-0053	33139		2665	14471	0349	00253	1391
0200	-0059	33161		2667	14473	0383	00320	1370
0225	-0063	33192		2670	14476	0418	00394	1344
0250	-0067	33222		2672	14479	0451	00476	1319
0300	-0075	33276		2677	14484	0516	00660	1271
0400	-0094	33334		2682	14492	0642	01109	1214

C-REF-NO 359	YR 1962	DEPTH 457	WAVES 1 22XX	AIR T 02.2	VIS 8
CONS. NO 142	MONTH 9	MXSAMPD 03	WAVES 2 XX	WET B	STN 142
LAT 62-37 N	DAY 27	NO.DPTH 11	WND-DIR 220	WW-CODE	
LON 78-00 W	HR 14.7	W-COLOR	WND-SPD 15	CLD-TPE 3	
MARSD SQ 224	C/I 1810	W-TRNSP	BARO 1020.	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
147	0000	0250	28090		2244	14511
147	0008	0246	28696		2293	14518
147	0015	0192	29202		2337	14502
147	0023	0143	29854		2392	14491
147	0038	0021	30948		2486	14453
147	0057	-0001	31144		2502	14448
147	0077	-0011	31896		2563	14457
147	0115	-0073	32894		2646	14449
147	0153	-0077				
147	0230	-0069				
147	0306	-0076	33144		2666	14483

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0250	28090		2244	14511	0000	00000	5407
0010	0232	28839		2305	14515	0051	00002	4825
0020	0161	29608		2371	14495	0097	00009	4196
0030	0083 C	3043 G		2441	14472	0135	00019	3530
0050	-0002 C	3112 I		2500	14446	0201	00045	2961
0075	-0010	3181 C		2556	14456	0268	00088	2427
0100	-0049 B	3255 C		2618	14453	0322	00135	1844
0125	-0077	3320 I		2671	14453	0362	00180	1338
0150	-0078	3367 I		2709	14463	0391	00221	0978
0175	-0075	3399 I		2734	14473	0413	00257	0736
0200	-0072	3415 I		2747	14481	0430	00289	0611
*0225	-0070	3416 I		2748	14486	0445	00322	0603
0250	-0075 B	3402 I		2737	14486	0462	00363	0708
0300	-0076	3327 B		2677	14483	0512	00508	1272

C-REF-NO 359	YR 1962	DEPTH 269	WAVES 1 20X9	AIR T 03.3	VIS .7
CONS. NO 143	MONTH 9	MXSAMPD 02	WAVES 2 2029	WET B	STN 143
LAT 62-28 N	DAY 27	NO.DPTH 10	WND-DIR 200	WW-CODE	
LON 76-00 W	HR 20.9	W-COLOR	WND-SPD 19	CLD-TPE 6	
MARSD SQ 224	C/I 1810	W-TRNSP	BARO 1019.	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
209	0000	0273	29070		2321	14534
209	0009	0254	29083		2323	14527
209	0017	0255	29078		2323	14529
209	0026	0249	29134		2327	14529
209	0043	0085	30658		2459	14479
209	0065	0063	31499		2528	14484
209	0087	0031	31929		2564	14479
209	0130	-0035	32722		2631	14467
209	0173	-0056	33053		2658	14469
209	0216	-0076	33213		2672	14469

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0273	29070		2321	14534	0000	00000	4677
0010	0254	29081		2323	14527	0047	00002	4655
0020	0257	2906 D		2321	14530	0094	00010	4669
0030	0214 E	2944 I		2355	14518	0139	00021	4353
0050	0067 D	3102 H		2489	14477	0214	00050	3070
0075	0049	3172 D		2546	14482	0284	00094	2524
0100	0009	3220 D		2586	14475	0343	00146	2141
0125	-0028	3264 B		2624	14468	0392	00203	1782
0150	-0048	3292 C		2647	14467	0434	00262	1565
0175	-0064 B	3311 H		2663	14466	0472	00324	1405
0200	-0074	3321 D		2671	14467	0506	00390	1328

C-REF-NO 359	YR 1962	DEPTH 314	WAVES 1 22XX	AIR T 06.1	VIS 8
CONS. NO 144	MONTH 9	MXSAMPD 03	WAVES 2 2046	WET B	STN 144
LAT 63-06 N	DAY 29	NO.DPTH 10	WND-DIR 220	WW-CODE	
LON 75-52 W	HR 14.6	W-COLOR	WND-SPD 10	CLD-TPE 2	
MARSD SQ 224	C/I 1810	W-TRNSP	BARO 1008.	CLD-AMT 2	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
146	0000	0244	29450		2353	14526
146	0010	0232	29459		2355	14523
146	0019	0233	29457		2354	14525
146	0028	0226	29463		2355	14523
146	0047	0128	30616		2453	14498
146	0070	0065	31834		2555	14490
146	0094	0018	32665		2624	14484
146	0141	-0042	32921		2647	14468
146	0188	-0080	33214		2672	14462
146	0280	-0099	33406		2688	14471

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0244	29450		2353	14526	0000	00000	4368
0010	0232	29459		2355	14523	0044	00002	4353
0020	0233	2945 B		2354	14525	0088	00009	4361
0030	0217 B	2955 G		2363	14521	0131	00020	4273
0050	0118	30792		2468	14496	0207	00050	3268
0075	0054	32045		2572	14489	0276	00093	2279
0100	0009	3275 I		2631	14482	0327	00137	1720
0125	-0025	3293 I		2647	14473	0368	00185	1562
0150	-0051	32981		2652	14466	0407	00239	1514
0175	-0072	3314 B		2666	14463	0443	00300	1384
0200	-0087	3322 G		2673	14461	0477	00365	1316
0225	-0097	3330 F		2679	14461	0510	00436	1250
*0250	-0102	3336 D		2685	14464	0541	00511	1200

C-REF-NO 359 YR 1962 DEPTH 263 WAVES 1 20X9 AIR T 06.7 VIS 8
 CONS. NO 145 MONTH 9 MXSAMPD 02 WAVES 2 2029 WET B STN 145
 LAT 63-40 N DAY 29 NO.DPTH 10 WND-DIR 200 WW-CODE
 LON 75-47 W HR 19.3 W-COLOR WND-SPD 16 CLD-TPE 1
 MARSD SQ 224 C/I 1810 W-TRNSP BARO 1004. CLD-AMT 3 HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
193	0000	0167	32170		2575	14529
193	0010	0151	32221		2581	14524
193	0020	0151	32217		2580	14526
193	0030	0140	32222		2581	14523
193	0050	0086	32801		2631	14510
193	0075	0050	32950		2645	14500
193	0100	0040	32978		2648	14500
193	0150	0000	33100		2660	14491
193	0200	-0035	33182		2668	14485
193	0250	-0089	33350		2683	14470

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0167	32170		2575	14529	0000	00000	2250
0010	0151	32221		2581	14524	0022	00001	2201
0020	0151	32217		2580	14526	0045	00005	2204
0030	0140	32222		2581	14523	0067	00010	2193
0050	0086	32801		2631	14510	0106	00026	1721
0075	0050	32950		2645	14500	0148	00052	1587
0100	0040	32978		2648	14500	0187	00088	1560
0125	0021	3304 B		2653	14496	0226	00132	1506
0150	0000	33100		2660	14491	0263	00185	1446
0175	-0017	3314 B		2663	14488	0299	00245	1408
0200	-0035	33182		2668	14485	0334	00312	1365
0225	-0063	3327 B		2676	14477	0367	00385	1282
0250	-0089	33350		2683	14470	0399	00461	1212

G-REF-NO 359	YR 1962	DEPTH 249	WAVES 1 22XX	AIR T 04.4	VIS 7
CONS. NO 146	MONTH 9	MXSAMPD 02	WAVES 2 2246	WET B	STN 146
LAT 64-08 N	DAY 29	NO.DPTH 9	WND-DIR 220	WW-CODE	
LON. 75-42 W	HR 22.7	W-COLOR	WND-SPD 10	CLD-TPE 7	
MARSD SQ 224	C/I 1810	W-TRNSP	BARO 1003.	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
227	0000	0167	32730		2620	14537
227	0009	0149	32753		2623	14531
227	0017	0149	32752		2623	14532
227	0026	0128	32799		2628	14525
227	0043	0098	32856		2635	14515
227	0065	0088	32888		2638	14514
227	0087	0074	32916		2641	14512
227	0130	0060	32956		2645	14513
227	0173	0047	32988		2648	14515

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0167	32730		2620	14537	0000	00000	1824
0010	0149	32752		2623	14531	0018	00001	1796
0020	0143	32765		2625	14530	0036	00004	1782
0030	0119	32816		2630	14522	0054	00008	1729
0050	0093	32869		2636	14514	0088	00022	1673
0075	0082	32901		2639	14513	0130	00049	1642
0100	0069	32930		2642	14512	0171	00086	1613
0125	0061	32952		2645	14513	0211	00132	1591
0150	0052	32973		2647	14513	0251	00188	1569
0175	0047	32989		2648	14515	0290	00254	1554

C-REF-NO 359	YR 1962	DEPTH 183	WAVES 1 30X4	AIR T 02.2	VIS 6
CONS. NO 147	MONTH 9	MXSAMPD 01	WAVES 2 2226	WET B	STN 147
LAT 63-48 N	DAY 30	NO.DPTH 8	WND-DIR 300	WW-CODE	
LON 73-38 W	HR 04.8	W-COLOR	WND-SPD 05	CLD-TPE	
MARSD SQ 224	C/I 1810	W-TRNSP	BARO 1007.	CLD-AMT 9	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
048	0000	0122	32730		2623	14517
048	0010	0107	32779		2628	14512
048	0020	0068	32902		2640	14498
048	0030	0056	32927		2643	14495
048	0050	0052	32938		2644	14496
048	0075	0050	32943		2644	14500
048	0100	0037	32959		2646	14498
048	0150	0004	33056		2656	14492

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0122	32730		2623	14517	0000	00000	1796
0010	0107	32779		2628	14512	0018	00001	1750
0020	0068	32902		2640	14498	0035	00003	1634
0030	0056	32927		2643	14495	0051	00008	1609
0050	0052	32938		2644	14496	0084	00021	1598
0075	0050	32943		2644	14500	0124	00047	1593
0100	0037	32959		2646	14498	0164	00082	1573
0125	0024	33000		2650	14497	0203	00128	1535
0150	0004	33056		2656	14492	0241	00181	1481

C-REF-NO 359	YR 1962	DEPTH 324	WAVES 1 34X4	AIR T 01.1	VIS 7
CONS. NO 148	MONTH 9	MXSAMPD 03	WAVES 2 3446	WET B	STN 148
LAT 63-14 N	DAY 30	NO.DPTH 10	WND-DIR 340	WW-CODE	
LON 73-44 W	HR 08.8	W-COLOR	WND-SPD 09	CLD-TPE	
MARSD SQ 224	C/I 1810	W-TRNSP	BARO 1011.	CLD-AMT 9	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
088	0000	0161	32340		2589	14529
088	0010	0166	32330		2588	14533
088	0020	0119	32691		2620	14518
088	0030	0100	32749		2626	14512
088	0050	-0006	32983		2650	14470
088	0075	-0041	33173		2667	14461
088	0100	-0066	33248		2674	14455
088	0150	-0091	33389		2687	14453
088	0200	-0105	33499		2696	14456
088	0300	-0103	33555		2700	14475

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0161	32340		2589	14529	0000	00000	2117
0010	0166	32330		2588	14533	0021	00001	2128
0020	0119	32691		2620	14518	0041	00004	1824
0030	0100	32749		2626	14512	0059	00009	1769
0050	-0006	32983		2650	14470	0093	00022	1535
0075	-0041	33173		2667	14461	0129	00045	1374
0100	-0066	33248		2674	14455	0163	00076	1306
0125	-0081	33321		2681	14453	0195	00113	1243
0150	-0091	33389		2687	14453	0226	00156	1186
0175	-0099	33449		2692	14454	0255	00204	1135
0200	-0105	33499		2696	14456	0283	00258	1094
0225	-0109	33526		2698	14459	0310	00318	1071
0250	-0109	33547		2700	14463	0337	00383	1053
0300	-0103	33555		2700	14475	0390	00533	1047

C-REF-NO 359	YR 1962	DEPTH 146	WAVES 1 35X6	AIR T 00.6	WIS 4
CONS. NO 149	MONTH 9	MXSAMPD 01	WAVES 2 2626	WET B	STN 149
LAT 62-44 N	DAY 30	NO.DPTH 7	WND-DIR 340	WW-CODE	
LON 73-50 W	HR 11.9	W-COLOR	WND-SPD 05	CLD-TPE	
MARSD SQ 224	C/I 1810	W-TRNSP	BARO	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
119	0000	0244	29680		2371	14529
119	0010	0230	29706		2374	14525
119	0020	0228	29710		2375	14526
119	0030	0166	30306		2426	14508
119	0050	0071	31403		2520	14484
119	0075	0023	31923		2564	14473
119	0100	0005	32323		2597	14475

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0244	29680		2371	14529	0000	00000	4193
0010	0230	29706		2374	14525	0042	00002	4164
0020	0228	29710		2375	14526	0084	00009	4159
0030	0166	30306		2426	14508	0123	00018	3667
0050	0071	31403		2520	14484	0188	00044	2778
0075	0023	31923		2564	14473	0252	00085	2357
0100	0005	32323		2597	14474	0308	00134	2042

C-REF-NO 359	YR 1962	DEPTH 333	WAVES 1 20X8	AIR T 01.1	VIS 4
CONS. NO 150	MONTH 9	MXSAMPD 03	WAVES 2 2926	WET B	STN 150
LAT 62-50 N	DAY 30	NO.DPTH 10	WND-DIR 330	WW-CODE	
LON 72-34 W	HR 15.6	W-COLOR	WND-SPD 09	CLD-TPE	
MARSD SQ 224	C/I 1810	W-TRNSP	BARO 1012.	CLD-AMT 9	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
156	0000	0211	31990		2558	14546
156	0010	0208	32045		2563	14547
156	0020	0205	32049		2563	14548
156	0030	0204	32178		2573	14551
156	0050	0050	32861		2638	14494
156	0075	-0050	33178		2668	14457
156	0100	-0085	33267		2677	14446
156	0150	-0112	33355		2685	14443
156	0200	-0110	33503		2696	14454
156	0300	-0094	33631		2706	14480

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0211	31990		2558	14546	0000	00000	2416
0010	0208	32045		2563	14547	0024	00001	2372
0020	0205	32049		2563	14548	0048	00005	2367
0030	0204	32178		2573	14551	0071	00011	2269
0050	0050	32861		2638	14494	0111	00026	1656
0075	-0050	33178		2668	14457	0149	00050	1367
0100	-0085	33267		2677	14446	0182	00080	1284
0125	-0104	3332 B		2681	14442	0214	00117	1239
0150	-0112	33355		2685	14443	0245	00160	1204
0175	-0113	33429		2691	14448	0274	00210	1146
0200	-0110	33503		2696	14454	0303	00264	1089
0225	-0116 B	3352 E		2698	14456	0330	00323	1074
0250	-0112 B	3356 D		2701	14462	0357	00388	1043
0300	-0094	33631		2706	14480	0408	00533	0993

C-REF-NO 359	YR 1962	DEPTH 322	WAVES 1 31XX	AIR T 01.7	VIS 8
CONS. NO 151	MONTH 9	MXSAMPD 03	WAVES 2 2782	WET B	STN 151
LAT 62-30 N	DAY 30	NO.DPTH 10	WND-DIR 310	WW-CODE 02	
LON 70-43 W	HR 22.3	W-COLOR	WND-SPD 11	CLD-TPE 6	
MARSD SQ 224	C/I 1810	W-TRNSP	BARO 1013.	CLD-AMT 7	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
223	0000	0056	32790		2632	14488
223	0010	0039	32831		2636	14482
223	0019	0041	32832		2636	14485
223	0028	0034	32860		2639	14483
223	0047	0027	32902		2642	14484
223	0070	0017	32949		2647	14484
223	0094	0013	32975		2649	14486
223	0141	0013	33007		2651	14494
223	0188	0006	33061		2656	14500
223	0280	-0038	33391		2685	14499

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0056	32790		2632	14488	0000	00000	1714
0010	0039	32831		2636	14482	0017	00001	1674
0020	0040	32835		2636	14485	0034	00003	1671
0030	0033	32865		2639	14483	0051	00008	1644
0050	0026	32909		2643	14484	0083	00021	1607
0075	0016	32956		2647	14484	0123	00047	1566
0100	0013	32979		2649	14487	0162	00082	1546
0125	0013	32996		2651	14492	0201	00127	1532
0150	0012	33013		2652	14496	0240	00181	1518
0175	0009	33041		2654	14499	0278	00244	1494
0200	0002	3310 B		2660	14500	0315	00315	1442
0225	-0008	3318 B		2666	14501	0350	00393	1382
*0250	-0020	33264		2674	14501	0384	00475	1308

C-REF-NO 359	YR 1962	DEPTH 336	WAVES 1 31XX	AIR T 00.0	VIS 8
CONS. NO 152	MONTH 10	MXSAMPD 03	WAVES 2 2742	WET B	STN 152
LAT 62-19 N	DAY 01	NO.DPTH 10	WND-DIR 310	WW-CODE 02	
LCN 71-06 W	HR 00.4	W-COLOR	WND-SPD 12	CLD-TPE	
MARSD SQ 224	C/I 1810	W-TRNSP	BARO 1013.	CLD-AMT 9	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
004	0000	0122	32480		2603	14513
004	0010	0107	32516		2607	14509
004	0019	0103	32558		2611	14509
004	0029	0045	32822		2635	14488
004	0048	0019	32920		2644	14481
004	0072	-0002	33002		2652	14476
004	0096	-0012	33041		2655	14476
004	0145	-0016	33119		2662	14483
004	0193	-0031	33255		2673	14486
004	0290	-0081	33620		2705	14484

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0122	32480		2603	14513	0000	00000	1986
0010	0107	32516		2607	14509	0020	00001	1950
0020	0098	3258 B		2613	14507	0039	00004	1894
0030	0042	32834		2636	14487	0057	00009	1672
0050	0017	32929		2645	14480	0090	00022	1587
0075	-0004	33008		2652	14476	0129	00047	1516
0100	-0013	33046		2656	14477	0167	00081	1482
0125	-0015	33084		2659	14480	0204	00123	1452
0150	-0017	33131		2663	14484	0240	00174	1414
0175	-0024	33199		2669	14486	0275	00232	1358
0200	-0032	3327 B		2675	14487	0308	00297	1300
0225	-0043	33352		2682	14487	0340	00366	1231
*0250	-0056	33446		2690	14487	0370	00440	1152

C-REF-NO 359	YR 1962	DEPTH 336	WAVES 1 31XX	AIR T 00.0	VIS 6
CONS. NO 153	MONTH 10	MXSAMPD 03	WAVES 2 3082	WET B	STN 153
LAT 62-08 N	DAY 01	NO.DPTH 10	WND-DIR 310	WW-CODE 00	
LON 71-30 W	HR 02.5	W-COLOR	WND-SPD 10	CLD-TPE	
MARSD SQ 224	C/I 1810	W-TRNSP	BARO 1014.	CLD-AMT 9	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
025	0000	0222	31790		2541	14548
025	0019	0214	31773		2540	14548
025	0028	0205	31872		2549	14547
025	0047	0092	32652		2619	14510
025	0070	-0032	33081		2659	14463
025	0094	-0058	33236		2673	14457
025	0141	-0083	33337		2682	14455
025	0188	-0105	33464		2693	14454
025	0280	-0087	33659		2708	14480

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0222	31790		2541	14548	0000	00000	2575
0010	0211	31772		2540	14545	0026	00001	2581
0020	0214	31777		2541	14548	0052	00005	2580
0030	0196	3195 E		2555	14544	0077	00012	2440
0050	0073	3273 B		2626	14503	0119	00028	1766
0075	-0042 B	3313 B		2664	14460	0159	00053	1408
0100	-0062	3326 B		2675	14456	0194	00084	1301
0125	-0077	3332 C		2680	14455	0226	00121	1248
0150	-0088	33361		2684	14454	0257	00165	1208
0175	-0100	33428		2690	14454	0286	00214	1151
0200	-0102 B	3348 B		2694	14458	0315	00269	1110
0225	-0102 B	3354 B		2699	14463	0342	00329	1065
*0250	-0097	33593		2703	14470	0369	00393	1023

C-REF-NO 359	YR 1962	DEPTH 122	WAVES 1 31XX	AIR T 00.0	VIS 7
CONS. NO 154	MONTH 10	MXSAMPD 01	WAVES 2 XX	WET B	STN 154
LAT 61-56 N	DAY 01	NO.DPTH 7	WND-DIR 310	WW-CODE 85	
LON 71-55 W	HR 04.5	W-COLOR	WND-SPD 10	CLD-TPE	
MARSD SQ 224	C/I 1810	W-TRNSP	BARO 1014.	CLD-AMT 9	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
045	0000	0228	29710		2375	14523
045	0010	0218	29737		2378	14520
045	0020	0168	30334		2429	14508
045	0030	0154	30443		2438	14505
045	0050	0135	30633		2454	14502
045	0075	0128	30740		2463	14505
045	0100	0083	31405		2519	14497

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0228	29710		2375	14523	0000	00000	4160
0010	0218	29737		2378	14520	0042	00002	4133
0020	0168	30334		2429	14508	0081	00008	3647
0030	0154	30443		2438	14505	0117	00017	3555
0050	0135	30633		2454	14502	0187	00046	3399
0075	0128	30740		2463	14504	0271	00100	3313
0100	0083	31405		2519	14497	0348	00167	2781

C-REF-NO 359	YR 1962	DEPTH 309	WAVES 1 31XX	AIR T 00.6	VIS 9
CONS. NO 155	MONTH 10	MXSAMPD 03	WAVES 2 3042	WET B	STN 155
LAT 61-43 N	DAY 01	NO.DPTH 10	WND-DIR 310	WW-CODE 02	
LON 69-05 W	HR 12.2	W-COLOR	WND-SPD 06	CLD-TPE 2	
MARSD SQ 223	C/I 1810	W-TRNSP	BARO 1011.	CLD-AMT 7	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
122	0000	0061	32820	947	2634	14491
122	0010	0055	32776	868	2631	14489
122	0020	0053	32788	835	2632	14490
122	0030	0049	32791	938	2632	14490
122	0050	0003	32906	829	2644	14473
122	0075	0002	32974	812	2649	14478
122	0100	-0015	33011	857	2653	14475
122	0150	-0003	33161	800	2665	14491
122	0200	-0006	33406	776	2685	14501
122	0300	-0045	33717	742	2711	14504

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0061	32820	947	2634	14491	0000	00000	1693
0010	0055	32776	868	2631	14489	0017	00001	1724
0020	0053	32788	835	2632	14490	0035	00004	1713
0030	0049	32791	938	2632	14490	0052	00008	1709
0050	0003	32906	829	2644	14473	0085	00022	1598
0075	0002	32974	812	2649	14478	0125	00047	1545
0100	-0015	33011	857	2653	14475	0163	00081	1508
0125	-0012 B	33074	839 B	2658	14481	0200	00124	1461
0150	-0003	33161	800	2665	14491	0236	00175	1398
0175	-0003	3328 B	786	2674	14497	0271	00232	1306
0200	-0006	33406	776	2685	14501	0302	00293	1208
0225	-0010	3346 F	756	2689	14504	0332	00358	1168
0250	-0019	3354 E	748	2696	14505	0361	00428	1097
0300	-0045	33717	742	2711	14504	0412	00572	0950

C-REF-NO 359	YR 1962	DEPTH 139	WAVES 1 XX	AIR T 01.1	VIS 1
CONS. NO 156	MONTH 10	MXSAMPD 01	WAVES 2 XX	WET B	STN 156
LAT 62-01 N	DAY 01	NO.DPTH 7	WND-DIR	WW-CODE 44	
LON 67-42 W	HR 17.8	W-COLOR	WND-SPD	CLD-TPE 6	
MARSD SQ 223	C/I 1810	W-TRNSP	BARO 1011.	CLD-AMT 7	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
178	0000	0011	32960		2648	14470
178	0010	0001	32883		2642	14466
178	0020	-0003	32893		2643	14466
178	0030	-0003	32896		2643	14467
178	0050	-0003	32896		2643	14471
178	0075	-0003	32903		2644	14475
178	0100	-0003	32908		2644	14479

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0011	32960		2648	14470	0000	00000	1562
0010	0001	32883		2642	14466	0016	00001	1616
0020	-0003	32893		2643	14466	0032	00003	1606
0030	-0003	32896		2643	14467	0048	00007	1604
0050	-0003	32896		2643	14471	0081	00021	1603
0075	-0003	32903		2644	14475	0121	00047	1597
0100	-0003	32908		2644	14479	0161	00083	1592

C-REF-NO 359	YR 1962	DEPTH 265	WAVES 1 31X1	AIR T -00.6	VIS 8
CONS. NO 157	MONTH 10	MXSAMPD 02	WAVES 2 XX	WET B	STN 157
LAT 61-44 N	DAY 01	NO.DPTH 10	WND-DIR 310	WW-CODE 40	
LON 68-18 W	HR 21.0	W-COLOR	WND-SPD 01	CLD-TPE 0	
MARSD SQ 223	C/I 1810	W-TRNSP	BARO 1011.	CLD-AMT 3	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
210	0000	0002	32870		2641	14464
210	0010	0007	32861		2640	14468
210	0020	0001	32869		2641	14467
210	0030	-0002	32897		2643	14468
210	0050	-0006	32912		2645	14469
210	0075	-0014	32934		2647	14470
210	0100	0003	33043		2655	14484
210	0150		33171			
210	0175	0036	33437		2685	14517
210	0225	0018	33649		2703	14520

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0002	32870		2641	14464	0000	00000	1627
0010	0007	32861		2640	14468	0016	00001	1636
0020	0001	32869		2641	14467	0033	00003	1626
0030	-0002	32897		2643	14468	0049	00008	1603
0050	-0006	32912		2645	14469	0081	00021	1589
0075	-0014	32934		2647	14470	0121	00046	1568
0100	0003	33043		2655	14484	0160	00081	1492
0125	0019	3308 G		2657	14496	0197	00124	1471
0150	0031	33171		2664	14506	0233	00175	1407
0175	0036	33437		2685	14517	0266	00230	1208
0200	0027	3350 H		2690	14518	0296	00287	1155
0225	0018	33649		2703	14520	0323	00347	1036

C-REF-NO 359	YR 1962	DEPTH 368	WAVES 1 31XX	AIR T 00.0	VIS 7
CONS. NO 158	MONTH 10	MXSAMPD 02	WAVES 2 3082	WET B	STN 158
LAT 61-25 N	DAY 02	NO.DPTH 10	WND-DIR 310	WW-CODE 40	
LON 68-55 W	HR 00.1	W-COLOR	WND-SPD 06	CLD-TPE 0	
MARSD SQ 223	C/I 1810	W-TRNSP	BARO 1012.	CLD-AMT 4	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
001	0000	0167	31560		2527	14521
001	0008	0153	31502		2523	14515
001	0016	0152	31510		2524	14516
001	0025	0150	31518		2524	14517
001	0041	0098	32049		2570	14503
001	0061	0053	32744		2628	14496
001	0082	0009	32936		2646	14482
001	0123	-0033	33115		2662	14472
001	0163	-0052	33453		2690	14474
001	0245	-0006	33751		2712	14513

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0167	31560		2527	14521	0000	00000	2714
0010	0152	31501		2523	14515	0027	00001	2749
0020	0152	3150 B		2523	14517	0055	00006	2750
0030	0136 B	3165 F		2536	14513	0082	00013	2628
0050	0076	3239 F		2599	14500	0129	00031	2028
0075	0023	3291 E		2643	14487	0175	00060	1607
0100	-0014	3302 D		2654	14475	0214	00095	1501
0125	-0035	33131		2664	14472	0251	00137	1407
0150	-0049	3334 C		2681	14472	0284	00184	1240
0175	-0051	3344 I		2689	14477	0314	00234	1163
0200	-0044	3356 I		2698	14486	0342	00288	1075
*0225	-0027	3367 E		2707	14499	0369	00345	0998
*0250	0000	3377 B		2714	14517	0393	00405	0933

C-REF-NO 359	YR 1962	DEPTH 603	WAVES 1 30XX	AIR T 00.0	VIS 5
CONS. NO 160	MONTH 10	MXSAMPD 05	WAVES 2 2882	WET B	STN 160
LAT 61-09 N	DAY 02	NO.DPTH 13	WND-DIR 300	WW-CODE 45	
LON 67-09 W	HR 10.3	W-COLOR	WND-SPD 09	CLD-TPE	
MARSD SQ 223	C/I 1810	W-TRNSP	BARO 1010.	CLD-AMT 9	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
103	0000	0122	32220	824	2582	14510
103	0010	0093	32209	765	2583	14498
103	0020	0085	32257	765	2587	14497
103	0029	0039	32756	765	2630	14484
103	0049	-0007	32863	801	2641	14468
103	0074	-0030	33034	755	2656	14464
103	0098	-0015	33152	741	2664	14477
103	0146	-0015	33353	720	2681	14487
103	0196	-0006	33602	720	2700	14503
103	0260	0022	33731	697	2709	14528
103	0346	0051	33995	674	2729	14559
103	0433	0098	34116	665	2736	14597
103	0520	0158	34276	640	2745	14640

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0122	32220	824	2582	14510	0000	00000	2184
0010	0093	32209	765	2583	14498	0022	00001	2176
0020	0085	32257	765	2587	14497	0044	00004	2135
0030	0035	3278 C	767	2632	14483	0063	00009	1712
0050	-0009	32870	800	2641	14468	0097	00023	1620
0075	-0030	33039	754	2656	14464	0136	00048	1481
0100	-0015	33160	740	2665	14477	0172	00080	1394
0125	-0013	33266	727	2674	14483	0206	00119	1314
0150	-0015	33375	720	2682	14488	0238	00165	1230
0175	-0011	3350 B	720	2693	14496	0268	00214	1133
0200	-0004	33612	719	2701	14505	0295	00267	1052
0225	0006	3367 C	711	2705	14514	0321	00324	1013
*0250	0017	3372 B	701	2708	14524	0347	00385	0984
0300	0035	3386 C	685	2719	14543	0394	00518	0888
0400	0078	3408 B	669	2734	14582	0476	00811	0749
0500	0143	3425 B	645	2744	14630	0548	01140	0666

C-REF-NO 359	YR 1962	DEPTH 137	WAVES 1 18XX	AIR T 00.6	VIS 8
CONS. NO 161	MONTH 10	MXSAMPD 01	WAVES 2 2926	WET B	STN 161
LAT 60-38 N	DAY 02	NO.DPTH 7	WND-DIR 180	WW-CODE 02	
LON 67-36 W	HR 15.4	W-COLOR	WND-SPD 09	CLD-TPE 7	
MARSD SQ 223	C/I 1810	W-TRNSP	BARO 1006.	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
154	0000	0156	31390		2514	14514
154	0010	0147	31382		2514	14511
154	0020	0155	31417		2516	14517
154	0030	0148	31439		2518	14516
154	0050	0073	32062		2572	14494
154	0075	0019	32515		2612	14479
154	0100	0005	32603		2619	14478

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0156	31390		2514	14514	0000	00000	2836
0010	0147	31382		2514	14511	0029	00001	2837
0020	0155	31417		2516	14517	0057	00006	2815
0030	0148	31439		2518	14516	0085	00013	2794
0050	0073	32062		2572	14494	0136	00033	2276
0075	0019	32515		2612	14479	0189	00067	1903
0100	0005	32603		2619	14478	0236	00109	1829

C-REF-NO 359	YR 1962	DEPTH 165	WAVES 1 19XX	AIR T 03.3	VIS 6
CONS. NO 162	MONTH 10	MXSAMPD 01	WAVES 2 1826	WET B	STN 162
LAT 59-42 N	DAY 02	NO.DPTH 7	WND-DIR 190	WW-CODE 55	
LON 67-46 W	HR 23.2	W-COLOR	WND-SPD 18	CLD-TPE	
MARSD SQ 187	C/I 1810	W-TRNSP	BARO 992.	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
232	0000	0180	31600		2529	14527
232	0010	0145	31529		2526	14512
232	0020	0144	31529		2526	14513
232	0030	0143	31526		2525	14515
232	0050	0122	31670		2538	14510
232	0075	0062	32174		2582	14494
232	0100	0010	32475		2609	14479

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0180	31600		2529	14527	0000	00000	2691
0010	0145	31529		2526	14512	0027	00001	2724
0020	0144	31529		2526	14513	0055	00006	2723
0030	0143	31526		2525	14515	0082	00013	2725
0050	0122	31670		2538	14510	0136	00034	2602
0075	0062	32174		2582	14494	0196	00072	2185
0100	0010	32475		2609	14479	0248	00118	1929

C-REF-NO 359 YR 1962 DEPTH 157 WAVES 1 21XX AIR T 04.4 VIS 7
 CONS. NO 163 MONTH 10 MXSAMPD 01 WAVES 2 XX WET B STN 163
 LAT 59-15 N DAY 03 NO.DPTH 7 WND-DIR 210 WW-CODE 00
 LON 67-50 W HR 02.1 W-COLOR WND-SPD 13 CLD-TPE
 MARSD SQ 187 C/I 1810 W-TRNSP BARO 992. CLD-AMT 9 HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
021	0000	0220	30720		2456	14533
021	0010	0198	30745		2459	14525
021	0019	0194	30780		2462	14525
021	0028	0192	30774		2462	14526
021	0046	0142	31194		2499	14512
021	0069	0071	31929		2562	14494
021	0093	0011	32412		2604	14477

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0220	30720		2456	14533	0000	00000	3387
0010	0198	30745		2459	14525	0034	00002	3353
0020	0194	30777		2462	14526	0067	00007	3326
0030	0188	3080 B		2465	14525	0101	00015	3302
0050	0129	3132 C		2510	14509	0163	00040	2870
0075	0058	3199 I		2568	14490	0228	00081	2320

C-REF-NO 359	YR 1962	DEPTH 117	WAVES 1 24X4	AIR T 03.9	VIS 8
CONS. NO 164	MONTH 10	MXSAMPD 01	WAVES 2 2446	WET B	STN 164
LAT 59-15 N	DAY 03	NO.DPTH 7	WND-DIR 240	W-CODE 00	
LON 66-55 W	HR 05.5	W-COLOR	WND-SPD 10	CLD-TPE	
MARSD SQ 187	C/I 1810	W-TRNSP	BARO 992.	CLD-AMT 9	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
055	0000	0228	30960		2474	14540
055	0009	0220	30892		2470	14537
055	0017	0216	30896		2470	14536
055	0026	0210	30930		2473	14536
055	0043	0179	31220		2499	14529
055	0065	0138	31802		2548	14522
055	0087	0102	31803		2550	14509

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0228	30960		2474	14540	0000	00000	3210
0010	0219	30890		2470	14537	0033	00002	3257
0020	0214	30901		2471	14536	0065	00007	3245
0030	0204	30979		2478	14534	0097	00015	3179
0050	0166	3142 G		2516	14527	0158	00039	2816
0075	0122	3176 I		2545	14516	0225	00082	2535

C-REF-NO 359	YR 1962	DEPTH 201	WAVES 1 24XX	AIR T 02.8	VIS 6
CONS. NO 165	MONTH 10	MXSAMPD 01	WAVES 2 2782	WET B	STN 165
LAT 59-58 N	DAY 03	NO.DPTH 8	WND-DIR 240	WW-CODE 60	
LON 66-08 W	HR 10.9	W-COLOR	WND-SPD 15	CLD-TPE 7	
MARSD SQ 187	C/I 1810	W-TRNSP	BARO 988.	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
109	0000	0180	31440		2516	14525
109	0010	0161	31411		2515	14518
109	0020	0159	31431		2517	14519
109	0030	0142	31575		2529	14515
109	0050	0093	31960		2563	14501
109	0075	0068	32211		2585	14498
109	0100	0048	32405		2601	14495
109	0150	0032	32623		2620	14499

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0180	31440		2516	14525	0000	00000	2813
0010	0161	31411		2515	14518	0028	00001	2823
0020	0159	31431		2517	14519	0057	00006	2807
0030	0142	31575		2529	14515	0084	00013	2687
0050	0093	31960		2563	14501	0135	00033	2365
0075	0068	32211		2585	14498	0192	00070	2160
0100	0048	32405		2601	14495	0244	00116	2001
0125	0037	32542		2613	14496	0293	00173	1890
0150	0032	32623		2620	14499	0340	00239	1825

C-REF-NO 359	YR 1962	DEPTH 314	WAVES 1 25XX	AIR T 01.7	VIS 6
CONS. NO 166	MONTH 10	MXSAMPD 01	WAVES 2 2546	WET B	STN 166
LAT 60-23 N	DAY 03	NO.DPTH 7	WND-DIR 250	WW-CODE 70	
LON 65-40 W	HR 14.2	W-COLOR	WND-SPD 10	CLD-TPE 7	
MARSD SQ 223	C/I 1810	W-TRNSP	BARO 986.	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
142	0000	0100	32510		2607	14504
142	0010	0077	32495		2607	14495
142	0019	0076	32491		2607	14496
142	0028	0076	32496		2607	14497
142	0047	0050	32679		2623	14491
142	0070	0028	33077		2656	14491
142	0094	0026	33215		2668	14496

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0100	32510		2607	14504	0000	00000	1951
0010	0077	32495		2607	14495	0020	00001	1949
0020	0076	32490		2607	14496	0039	00004	1953
0030	0074	32507		2608	14497	0059	00009	1939
0050	0046	3273 B		2628	14491	0096	00024	1751
0075	0027	3305 I		2654	14491	0137	00050	1499

C-REF-NO 359	YR 1962	DEPTH 225	WAVES 1 36XX	AIR T 00.6	VIS 5
CONS. NO 167	MONTH 10	MXSAMPD 02	WAVES 2 XX	WET B	STN 167
LAT 61-33 N	DAY 04	NO.DPTH 9	WND-DIR 360	WW-CODE 73	
LON 66-47 W	HR 01.4	W-COLOR	WND-SPD 08	CLD-TPE	
MARSD SQ 223	C/I 1810	W-TRNSP	BARO 996.	CLD-AMT 9	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
014	0000	0056	33100	789	2657	14492
014	0010	0045	32898	765	2641	14486
014	0020	0029	32924	755	2644	14481
014	0030	0017	32931	742	2645	14477
014	0050	-0002	32958	755	2648	14472
014	0075	-0004	32986	742	2651	14475
014	0100	0022	33036	765	2653	14492
014	0150	0029	33192	720	2666	14506
014	0200	0062	33515	701	2690	14534

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0056	33100	789	2657	14492	0000	00000	1477
0010	0045	32898	765	2641	14486	0016	00001	1626
0020	0029	32924	755	2644	14481	0032	00003	1598
0030	0017	32931	742	2645	14477	0048	00007	1586
0050	-0002	32958	755	2648	14472	0080	00020	1556
0075	-0004	32986	742	2651	14475	0118	00045	1533
0100	0022	33036	765	2653	14492	0157	00080	1507
0125	0028 B	33099	748 B	2658	14500	0194	00123	1461
0150	0029	33192	720	2666	14506	0230	00173	1391
0175	0053 C	3334 B	726 B	2677	14523	0264	00230	1288
0200	0062	33515	701	2690	14534	0295	00289	1163

C-REF-NO 359	YR 1962	DEPTH 278	WAVES 1 36X3	AIR T 00.6	VIS 7
CONS. NO 168	MONTH 10	MXSAMPD 02	WAVES 2 0582	WET B	STN 168
LAT 61-15 N	DAY 04	NO.DPTH 10	WND-DIR 360	WW-CODE 70	
LON 64-52 W	HR 10.3	W-COLOR	WND-SPD 05	CLD-TPE 7	
MARSD SQ 223	C/I 1810	W-TRNSP	BARO 1002.	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
103	0000	0062	32910		2641	14492
103	0010	0054	32907		2641	14490
103	0019	0053	32909		2642	14491
103	0028	0053	32955		2645	14493
103	0048	0028	33060		2655	14487
103	0072	0024	33191		2666	14491
103	0097	0008	33304		2676	14489
103	0148	0010	33545		2695	14502
103	0193	0016	33756		2712	14515
103	0241	0060	33852		2717	14544

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0062	32910		2641	14492	0000	00000	1625
0010	0054	32907		2641	14490	0016	00001	1623
0020	0053	32913		2642	14492	0033	00003	1618
0030	0051	32965		2646	14493	0049	00007	1577
0050	0027	33071		2656	14487	0080	00020	1484
0075	0022	33205		2667	14490	0116	00043	1379
0100	0007	33318		2677	14489	0149	00073	1285
0125	0006	33436		2686	14495	0180	00109	1194
0150	0010	33556		2696	14502	0209	00150	1104
0175	0011	33679		2706	14509	0236	00194	1011
0200	0026 B	3376 C		2711	14520	0261	00242	0959
0225	0045	3382 B		2715	14534	0285	00293	0921

C-REF-NO 359	YR 1962	DEPTH 296	WAVES 1 31X4	AIR T 01.1	VIS 8
CONS. NO 169	MONTH 10	MXSAMPD 02	WAVES 2 3186	WET B	STN 169
LAT 60-42 N	DAY 04	NO.DPTH 9	WND-DIR 310	WW-CODE 02	
LON 65-00 W	HR 20.0	W-COLOR	WND-SPD 10	CLD-TPE 6	
MARSD SQ 223	C/I 1810	W-TRNSP	BARO 1009.	CLD-AMT 6	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
200	0000	0080	32680		2622	14497
200	0010	0068	32656		2620	14493
200	0020	0065	32652		2620	14493
200	0030	0062	32662		2621	14494
200	0050	0055	32724		2627	14495
200	0075	0039	33002		2650	14495
200	0100	0033	33191		2665	14499
200	0150	0050	33190		2664	14515
200	0200	0066	33487		2687	14535

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0080	32680		2622	14497	0000	00000	1810
0010	0068	32656		2620	14493	0018	00001	1822
0020	0065	32652		2620	14493	0037	00004	1823
0030	0062	32662		2621	14494	0055	00008	1814
0050	0055	32724		2627	14495	0091	00023	1763
0075	0039	33002		2650	14495	0133	00050	1542
0100	0033	33191		2665	14499	0170	00083	1394
0125	0039	3320 H		2666	14506	0205	00123	1388
0150	0050	33190		2664	14515	0240	00173	1403
0175	0053 B	3340 I		2681	14524	0273	00228	1244
0200	0066	33487		2687	14535	0304	00287	1187

C-REF-NO 359	YR 1962	DEPTH 750	WAVES 1 34XX	AIR T 00.6	VIS 9
CONS. NO 170	MONTH 10	MXSAMPD 05	WAVES 2 3126	WET B	STN 170
LAT 60-57 N	DAY 04	NO.DPTH 12	WND-DIR 340	WW-CODE 02	
LON 65-03 W	HR 22.2	W-COLOR	WND-SPD 13	CLD-TPE 6	
MARSD SQ 223	C/I 1810	W-TRNSP	BARO 1011.	CLD-AMT 7	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
222	0000	0060	33130	812	2659	14494
222	0010	0043	33131	789	2660	14488
222	0020	0042	33130	765	2660	14489
222	0030	0042	33163	765	2663	14492
222	0050	0035	33332	765	2676	14494
222	0075	0032	33419	755	2684	14498
222	0100	0029	33498	742	2690	14502
222	0173	0098	34093	697	2734	14553
222	0260	0112	34137	674	2737	14575
222	0346	0154	34266	665	2744	14609
222	0433	0173	34320	685	2747	14633
222	0520	0200	34383	665	2750	14660

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	0060	33130	812	2659	14494	0000	00000	1457
0010	0043	33131	789	2660	14488	0015	00001	1447
0020	0042	33130	765	2660	14489	0029	00003	1447
0030	0042	33163	765	2663	14492	0044	00007	1422
0050	0035	33332	765	2676	14494	0071	00018	1289
0075	0032	33419	755	2684	14498	0103	00038	1221
0100	0029	33498	742	2690	14502	0133	00065	1159
0125	0049 C	3370 I	726	2705	14518	0160	00096	1016
0150	0073 C	3390 I	710	2720	14536	0184	00130	0875
0175	0099	34098	696	2734	14554	0204	00163	0744
0200	0105 B	3414 G	687	2737	14562	0223	00199	0716
*0225	0109 B	3416 H	680	2738	14568	0240	00238	0706
*0250	0112	3415 D	675	2738	14573	0258	00282	0716
0300	0131	3420 B	667	2740	14591	0294	00382	0694
0400	0167	34304	678	2746	14624	0361	00624	0643
0500	0196	34375	667	2750	14655	0425	00918	0617

SECTION IV

Bathythermograms

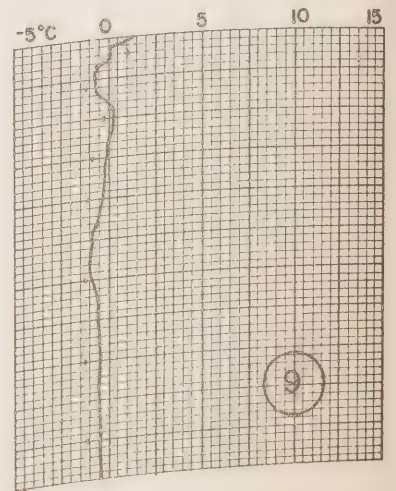
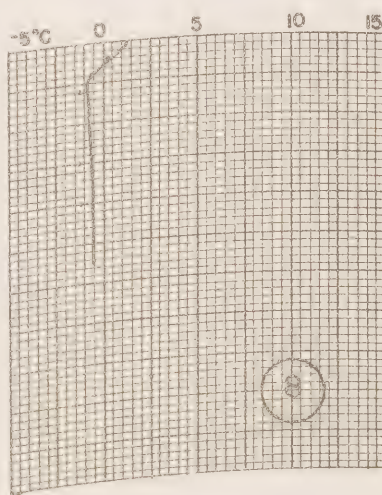
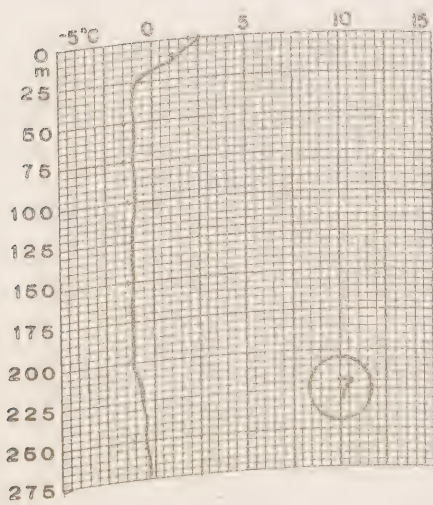
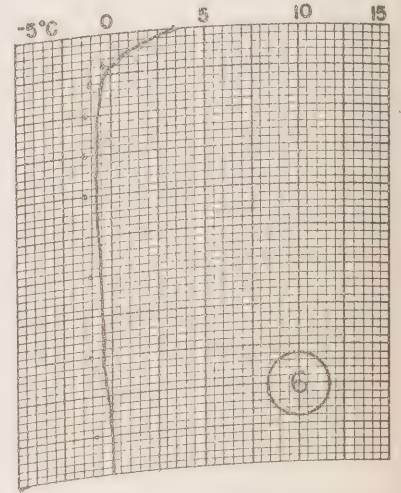
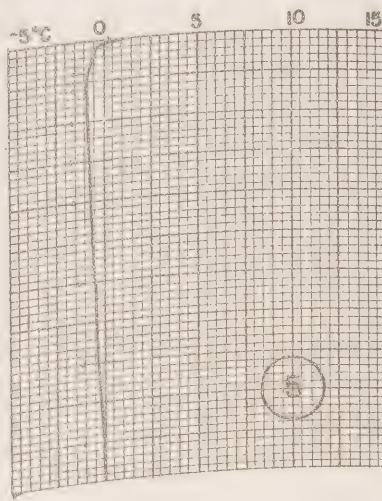
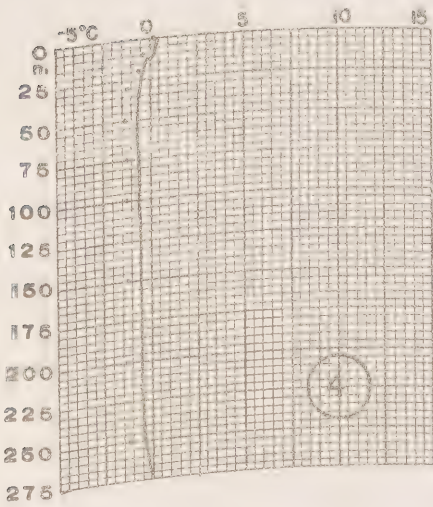
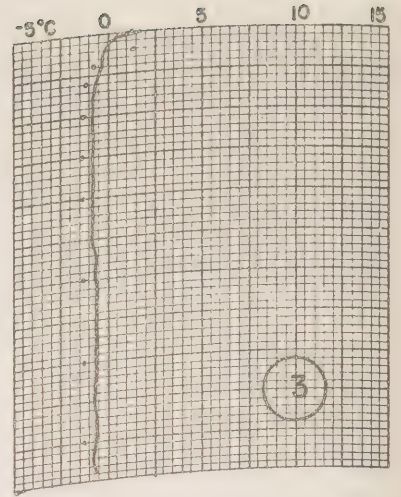
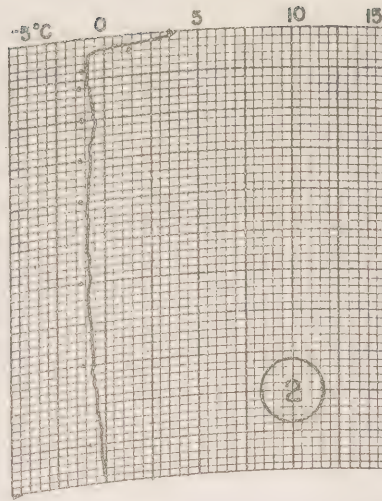
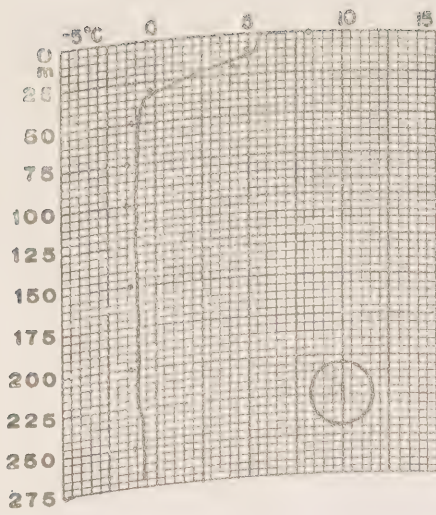
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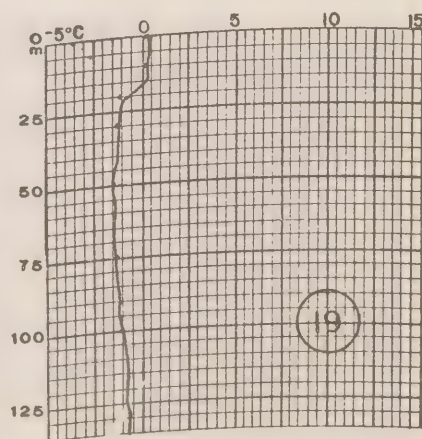
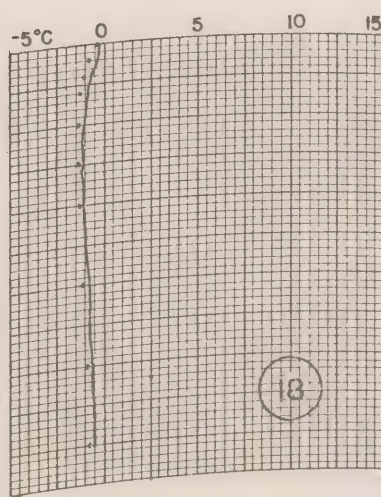
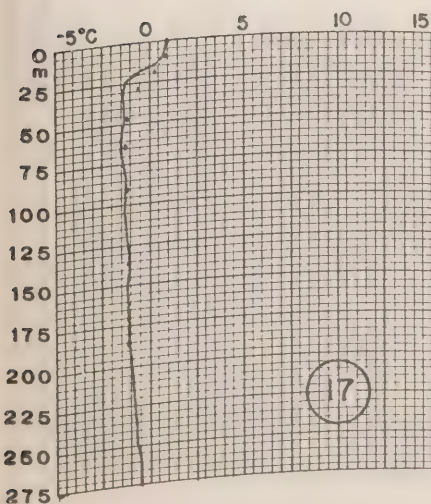
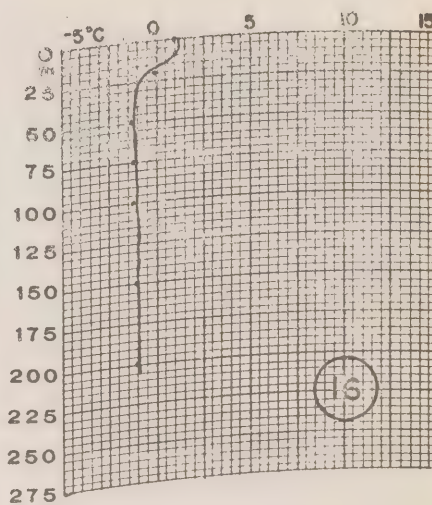
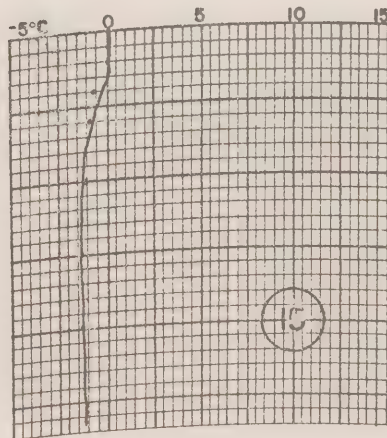
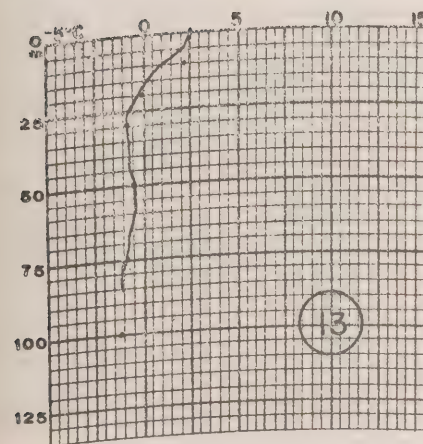
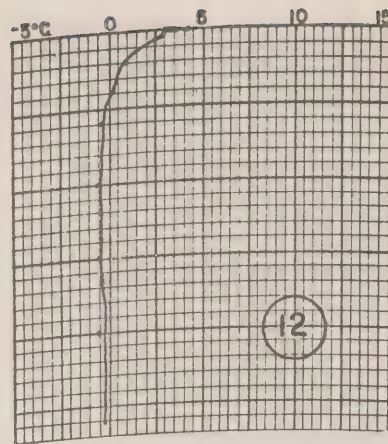
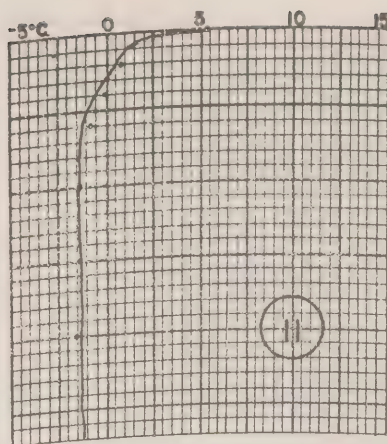
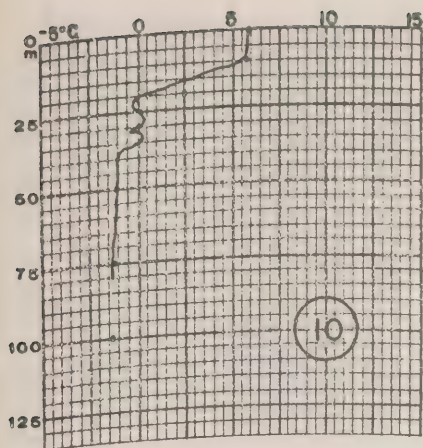
A listing of the BT slide number and consecutive station number. At those positions where only a BT lowering was made, the latitude, longitude and time are indicated.

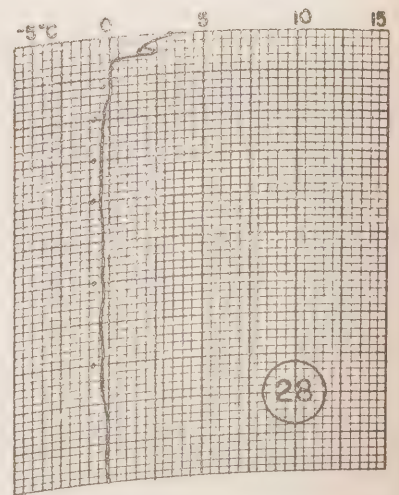
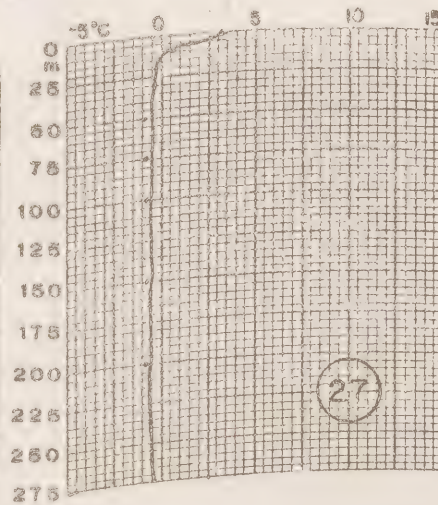
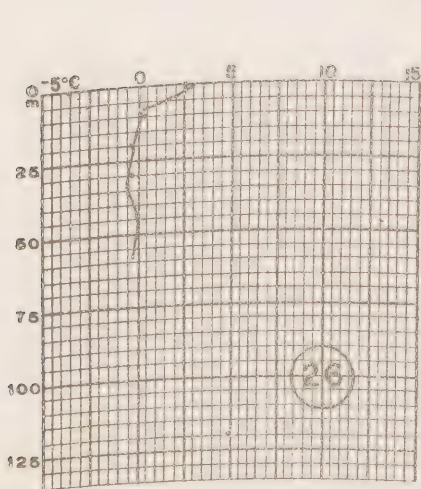
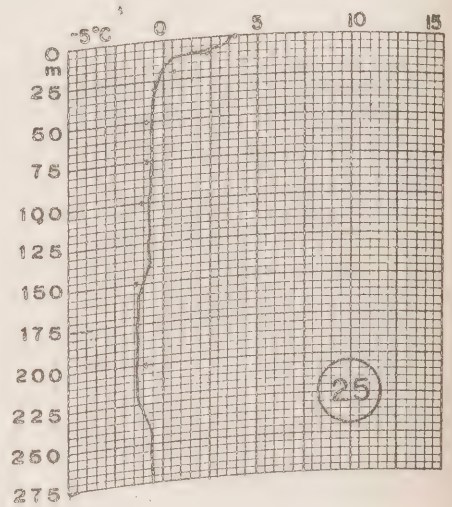
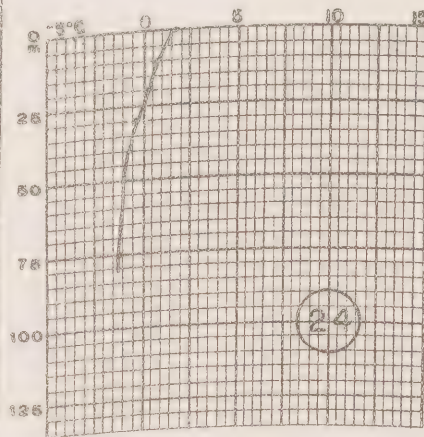
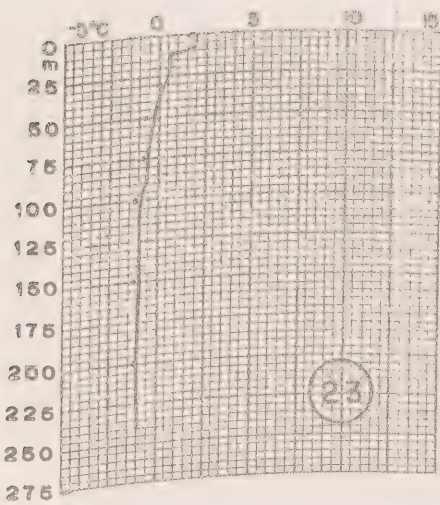
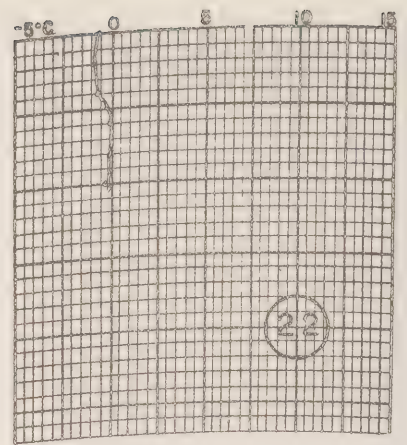
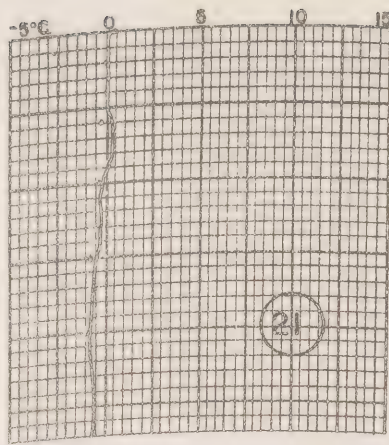
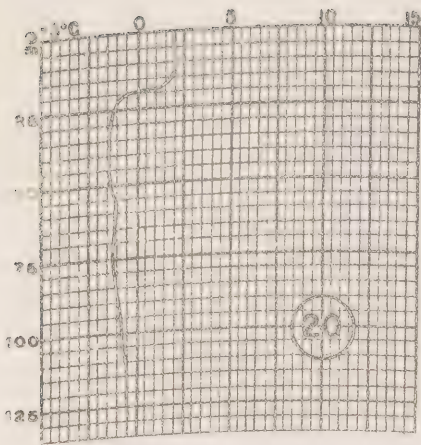
Slide No.	Stn. No.	Slide No.	Stn. No.
1	1	39	32
2	2	40	33
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5	5	43	35
6	6	44	36
7	7	45	37
8	8	46	38
9	9	47	39
10	10	48	40
11	11	49	41
12	12	50	42
13	13	50A	42
missing	14	51	43
15	15	52	44
16	16	53	45
17	17	54	46
18	18	54A	46
19	19	55	47
20	74°25'N, 98°02'W, 0715/8-VIII	56	48
21	20	57	49
22	21	58	50
23	22	59	51
24	23	60	52
25	24	61	53
26	25	62	54
27	26	63	74°50'N, 120°11'W, 2030/30/VIII
28	27	64	75°05'N, 119°15'W, 2220
29	28	65	55
30	29	66	75°01'N, 117°50'W, 0255/31
31	30	67	56
32	31	68	57
33	80°31.5'N, 83°50'W, 1845/22	69	58
33A	80°31.5'N, 83°50'W, 1855	70	74°02'N, 114°25'W, 1630
34	80°26'N, 82°00'W, 2025	71	59
35	80°37'N, 81°14'W, 2130	72	60
36	80°33'N, 80°18'W, 2225	73	74°51'N, 103°26'W, 1805/1/IX
37	81°24'N, 76°59'W, 1245/23	74	61
38	81°22'N, 77°25'W, 1355	75	62

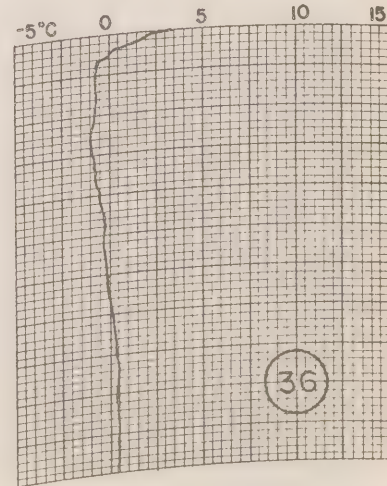
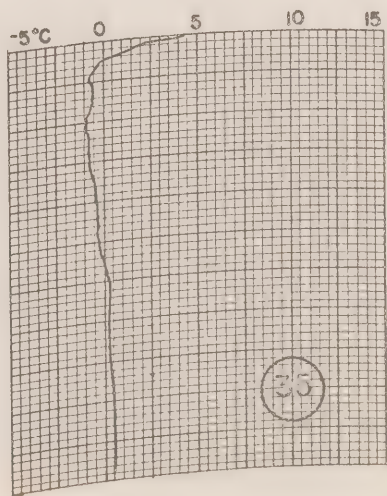
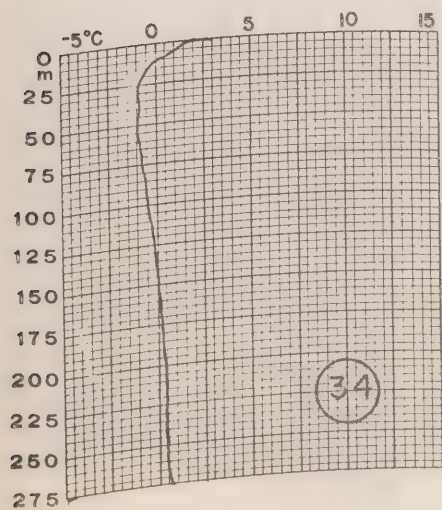
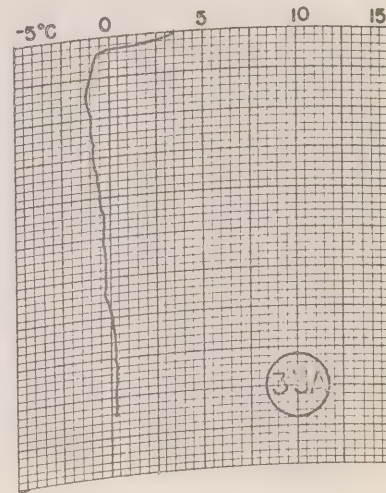
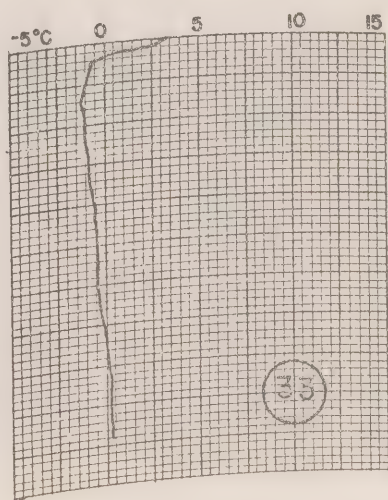
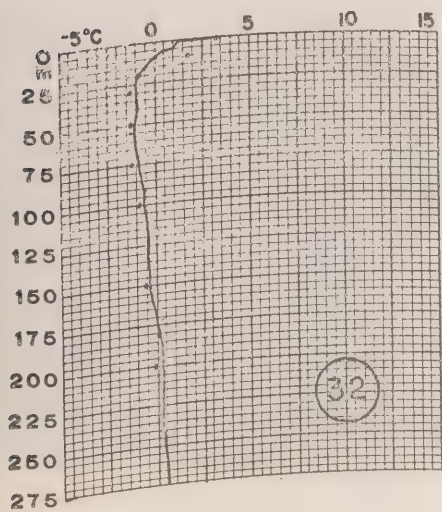
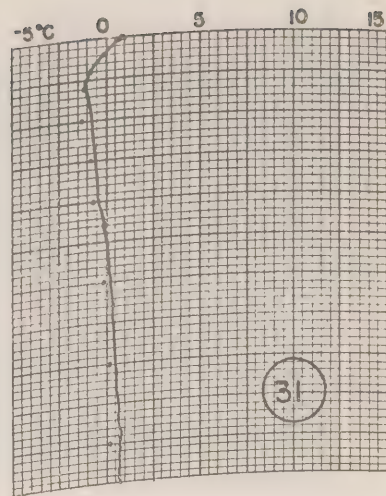
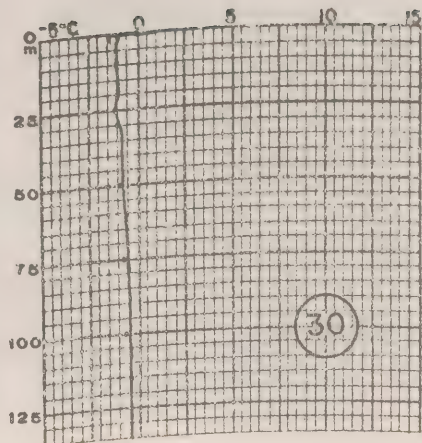
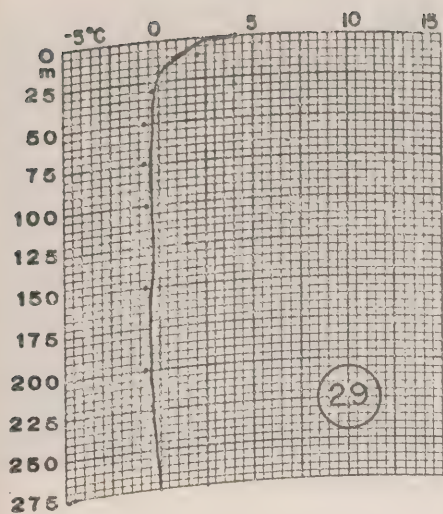
<u>Slide No.</u>	<u>Stn. No.</u>	<u>Slide No.</u>	<u>Stn. No.</u>
76	63	121	63°50'N, 77°27'W 1840/14
77	64	122	83
78	71°11'N, 98°14'W, 0200/4	123	84
79	71°06'N, 97°48'W, 0440	124	63°32'N, 78°44'W 0500/15
80	71°01'N, 97°18'W, 0650	125	85
81	70°56'N, 96°52'W, 0820	126	63°19'N, 79°53'W 1007/15
82	71°05'N, 98°26'W, 1945	127	86
83	65	128	87
84	66	129	88
85	67	130	89
86	71°40'N, 100°51'W, 0235/6	131	90
87	68	132	91
88	71°52'N, 100°56'W, 1340	133	92
89	71°51'N, 102°00'W, 1530	134	93
90	72°02'N, 101°31'W, 1707	135	94
91	72°31'N, 103°00'W, 2015	136	95
92	69	137	96
93	73°02'N, 104°45'W, 2345	138	97
94	72°25'N, 101°58'W, 0140/7	139	98
95	70	140	99
96	71	141	100
97	71°49'N, 93°00'W, 1930/8	142	101
98	71°50'N, 92°21'W, 2040	143	102
99	72	144	59°23'N, 87°07'W 1930/19
100	73	145	103
101	71°37'N, 91°43'W, 0315/9	146	58°49'N, 86°21'W 0545/20
102	71°21'N, 92°40'W, 0540	147	104
103	71°21'N, 91°25'W, 0745	148	105
104	71°20'N, 90°08'W, 1025	149	106
105	70°49'N, 91°08'W, 1300	150	107
106	70°44'N, 91°48'W, 1520	151	108
107	74	152	109
108	75	153	110
109	76	154	111
110	69°50'N, 88°05'W, 0400/10	155	112
111	77	156	113
112	69°21'N, 80°38'W, 0700/12	157	114
113	69°08'N, 80°18'W, 0945	158	115
114	78	159	116
115	68°04'N, 80°47'W, 0415/13	160	117
116	79	161	118
117	65°52'N, 80°20'W, 2100	162	119
118	80	163	120
119	81	164	121
120	82	165	122

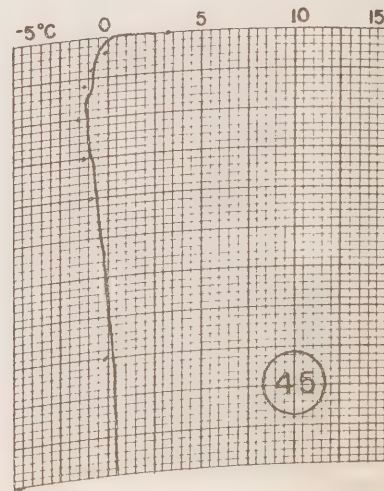
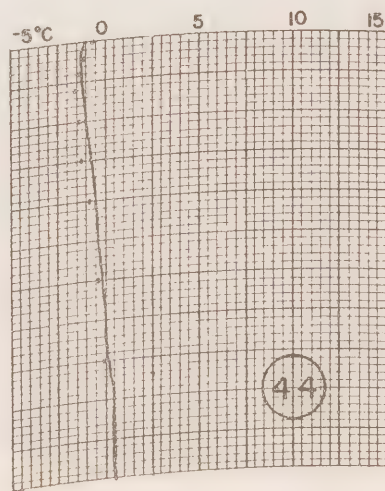
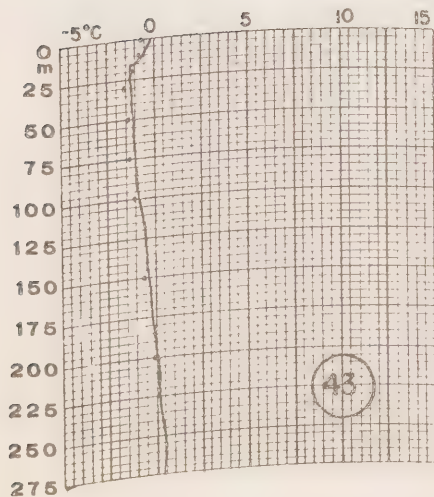
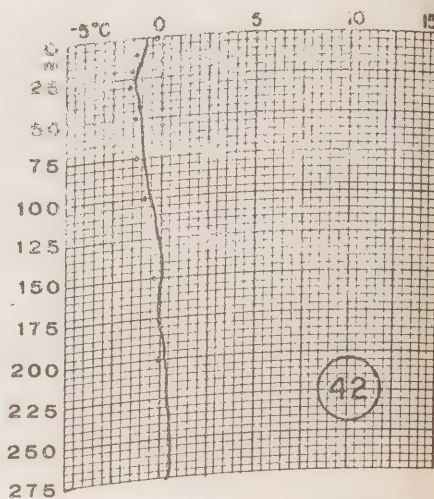
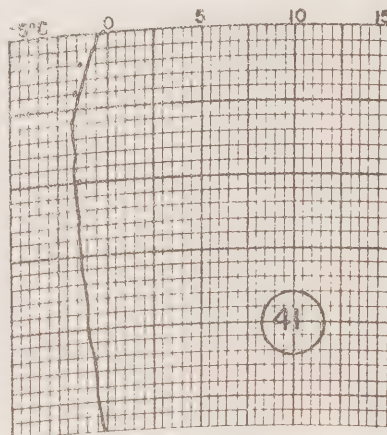
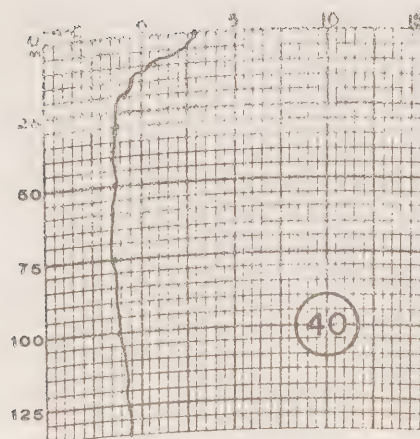
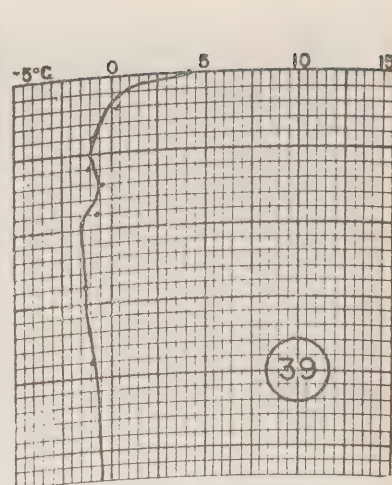
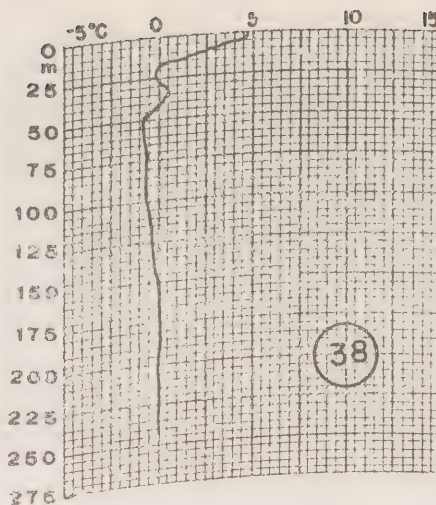
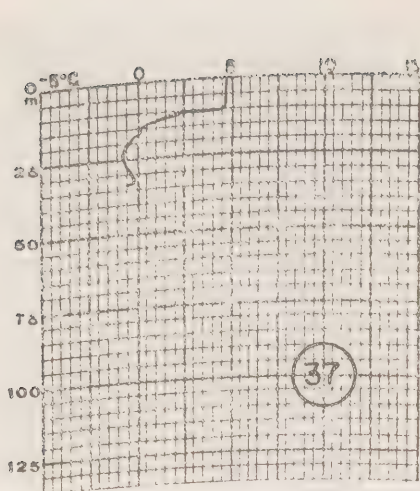
<u>Slide No.</u>	<u>Stn. No.</u>	<u>Slide No.</u>	<u>Stn. No.</u>
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168	125	195	152
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170	127	197	154
171	128	198	155
172	129	199	156
173	130	200	157
174	131	201	158
175	132	202	159
176	133	203	160
177	134	204	161
178	135	205	60°10'N 67°40'W, 1920/2/X
179	136	206	162
180	137	207	163
181	138	208	164
182	139	209	59°35'N, 66°33'W, 0735/3
183	140	210	165
184	141	211	166
185	142	212	60°30'N, 66°40'W 1806
186	143	213	167
187	144	214	61°47'N, 66°07'W 0453/4
188	145	215	168
189	146	216	60°24'N, 64°51'W 1730
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191	148	218	170

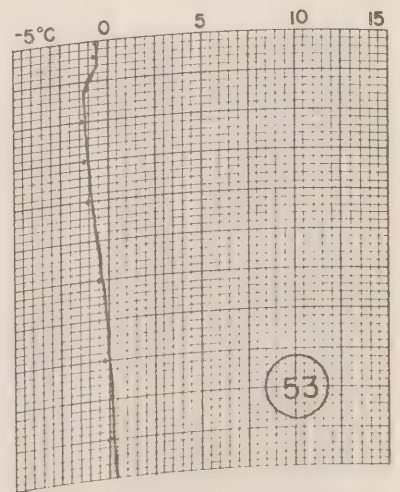
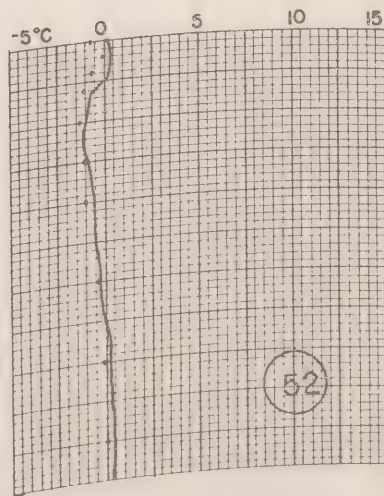
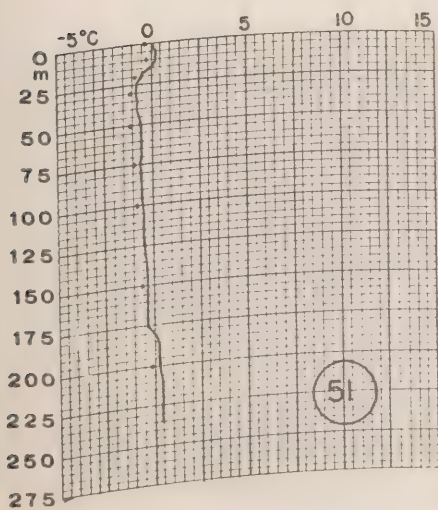
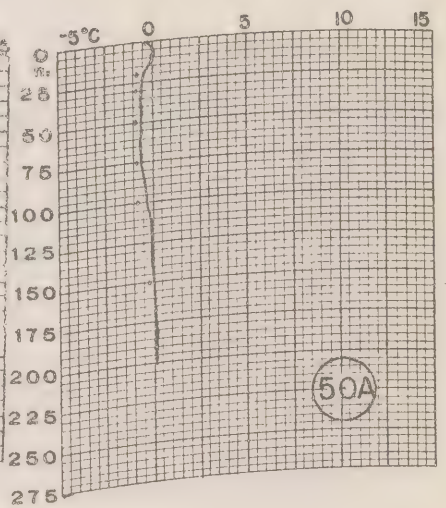
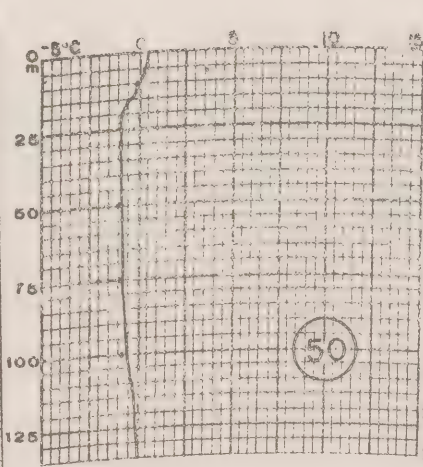
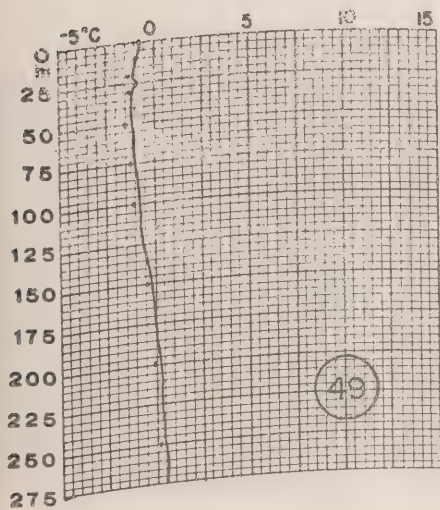
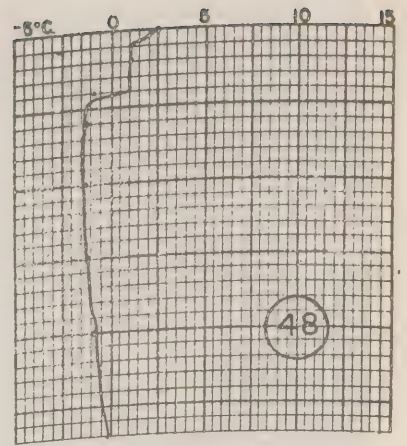
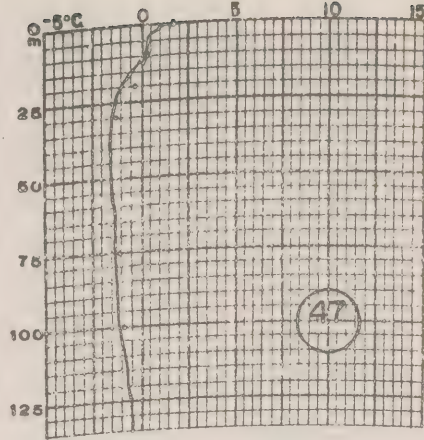
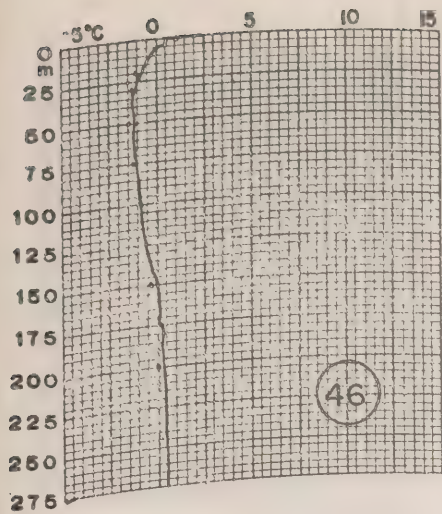


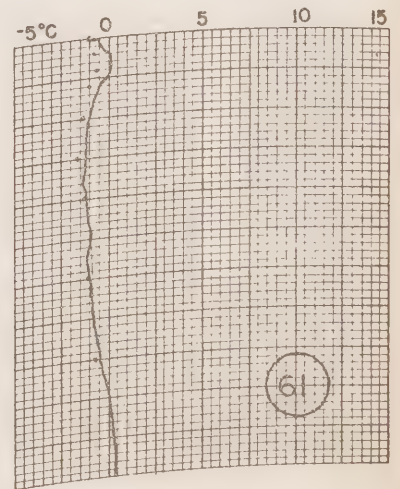
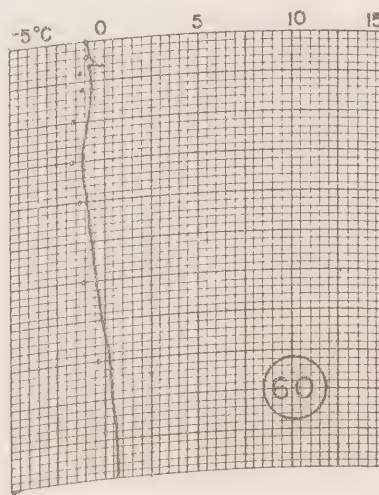
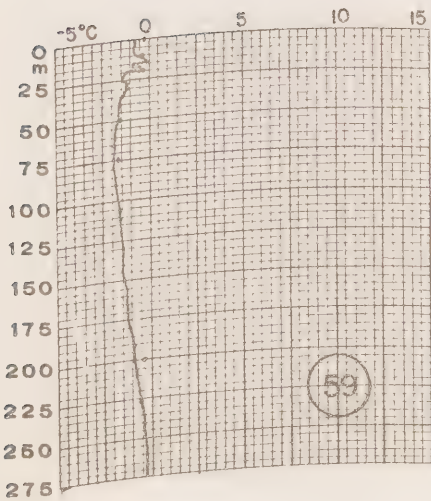
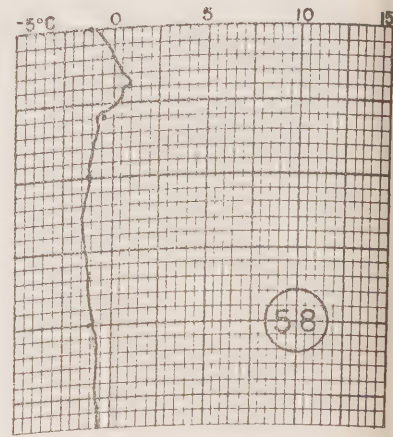
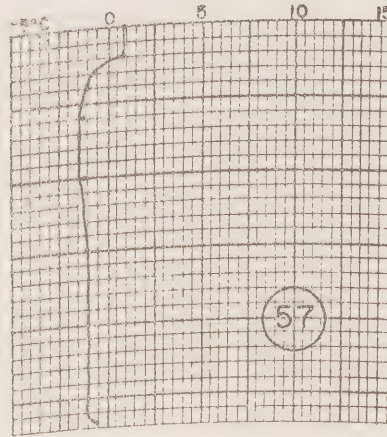
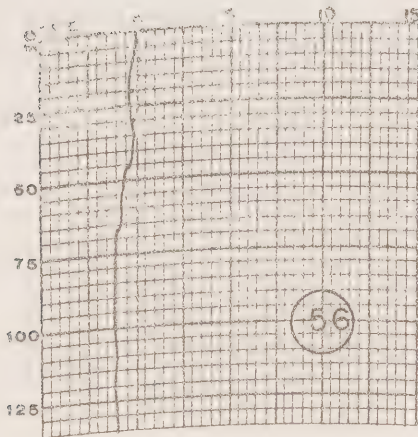
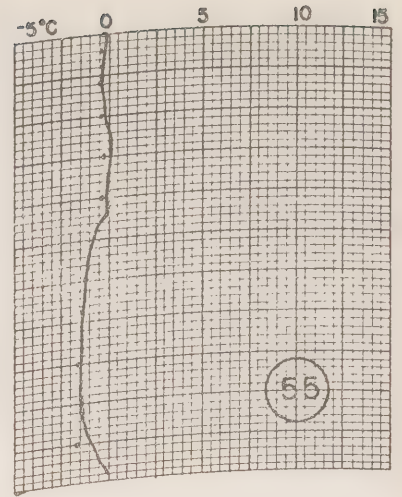
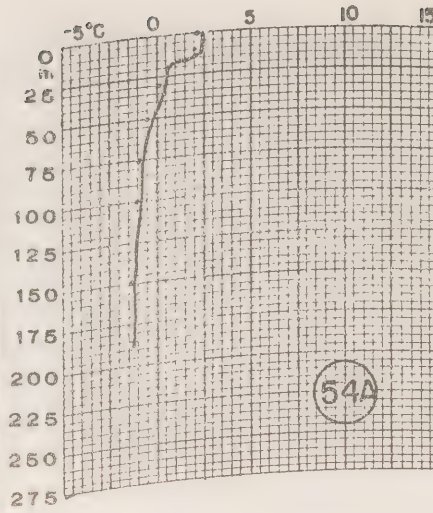
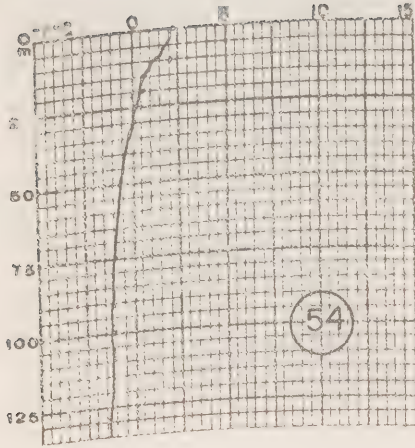


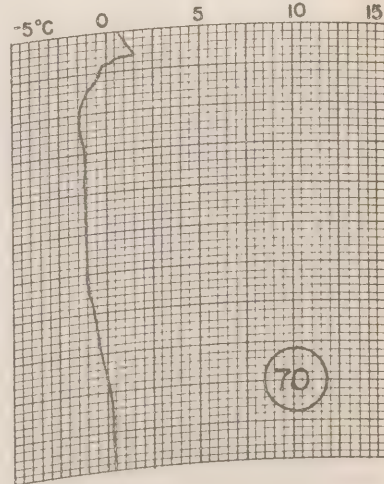
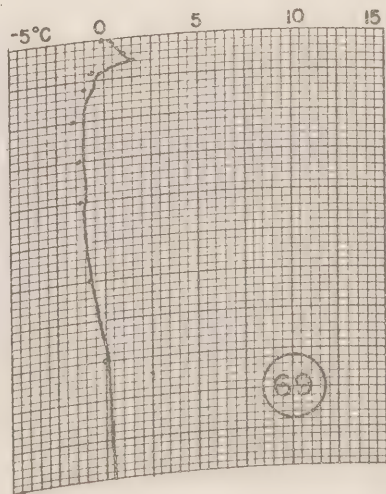
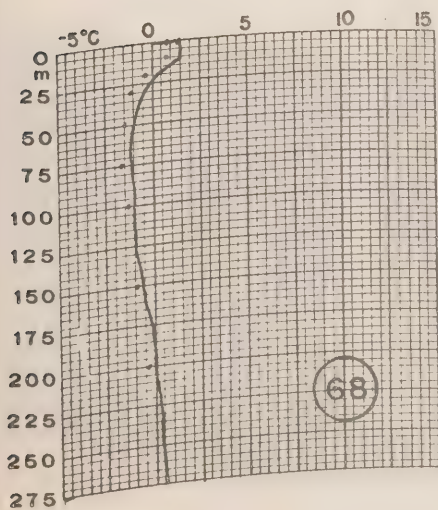
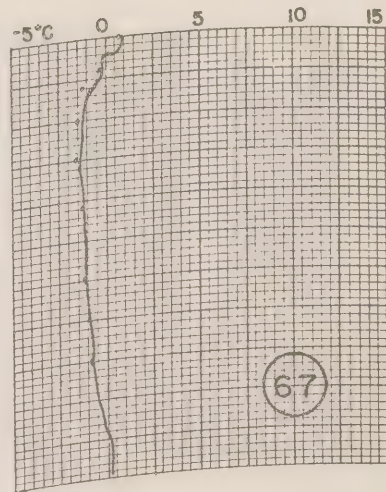
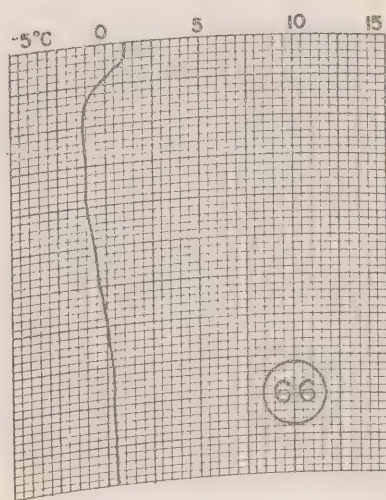
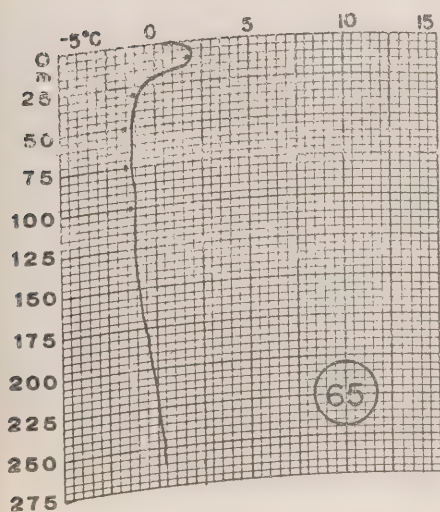
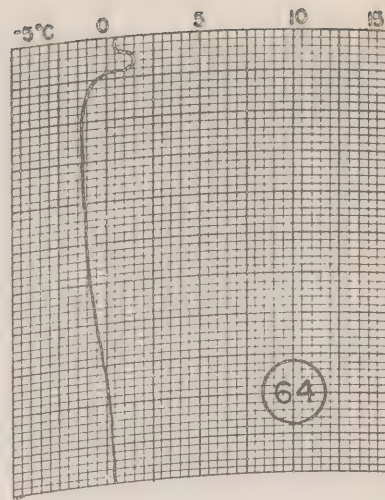
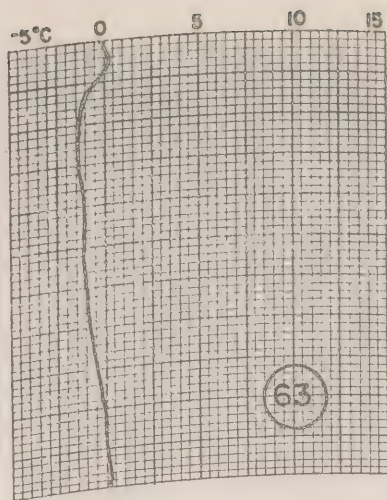
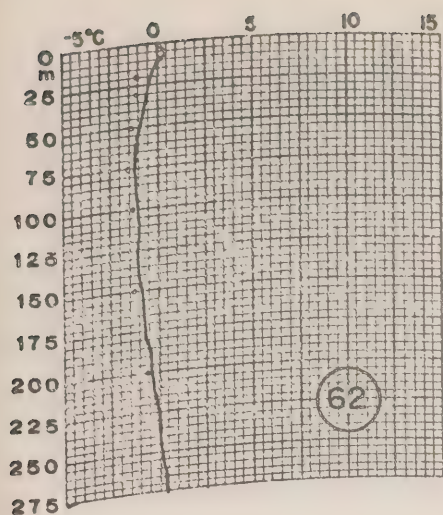


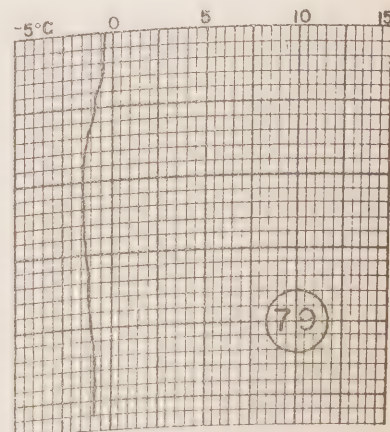
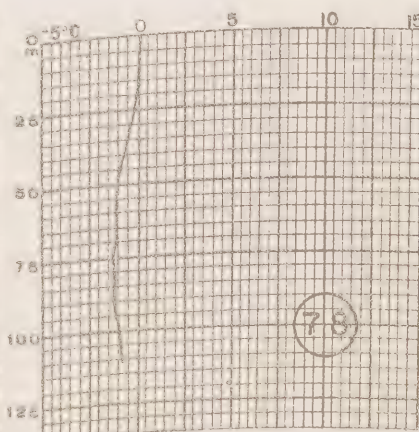
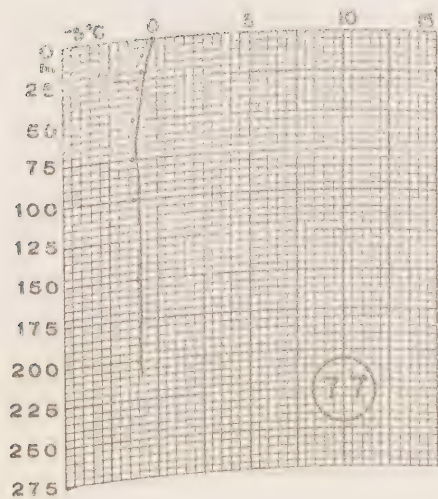
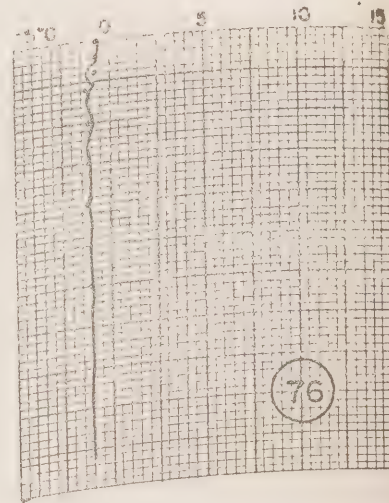
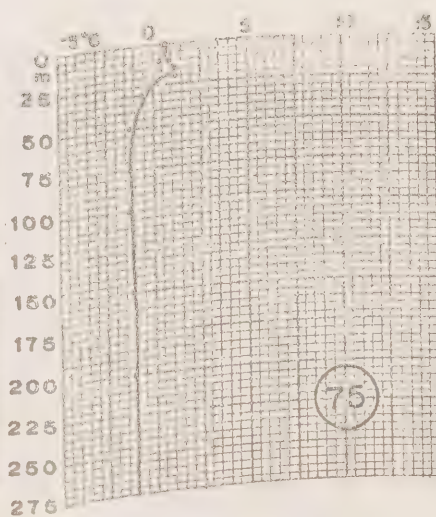
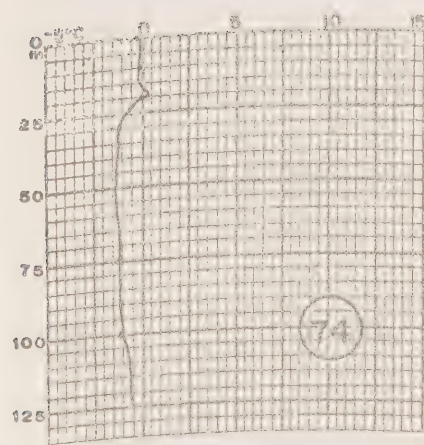
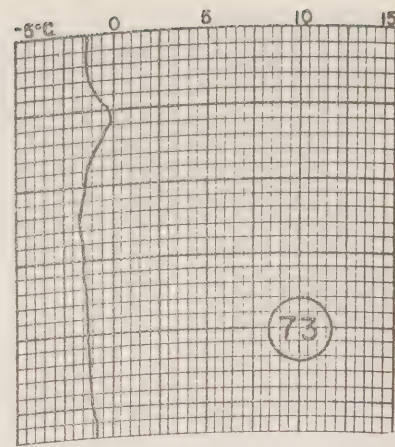
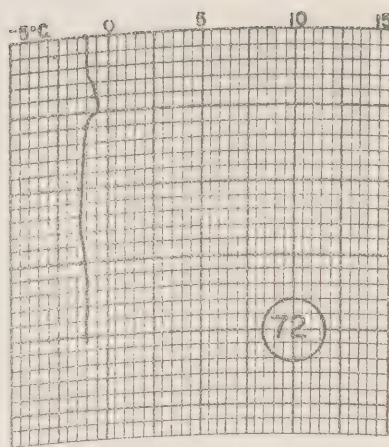
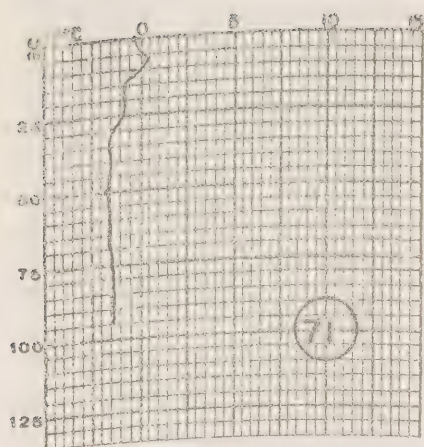


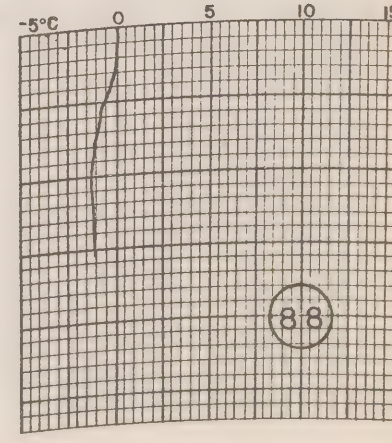
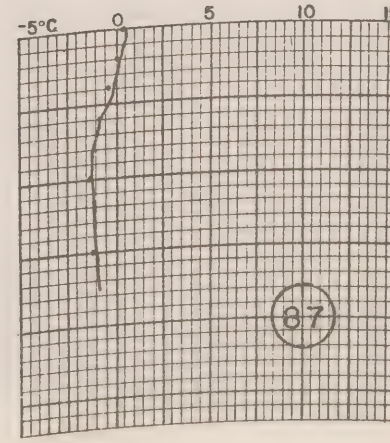
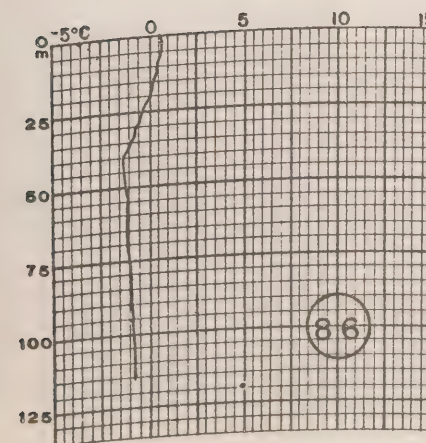
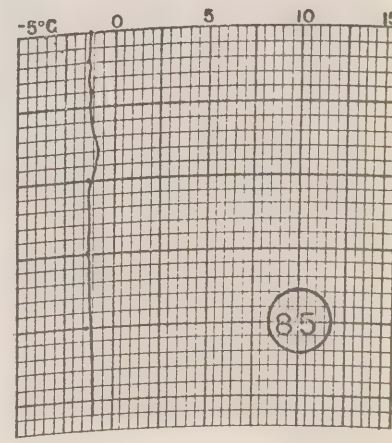
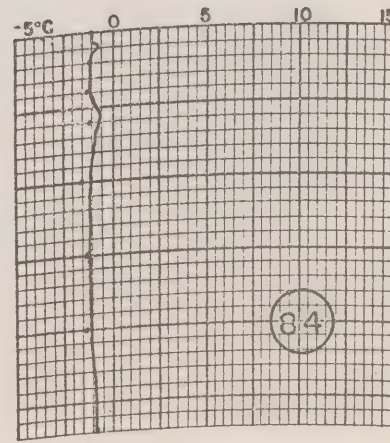
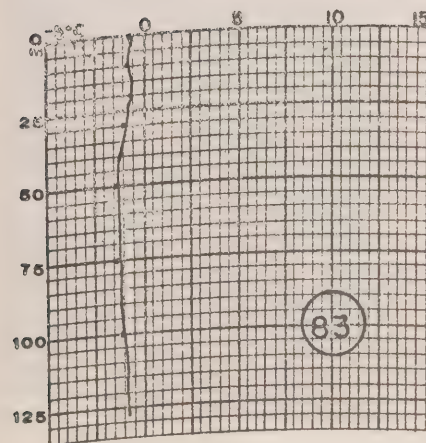
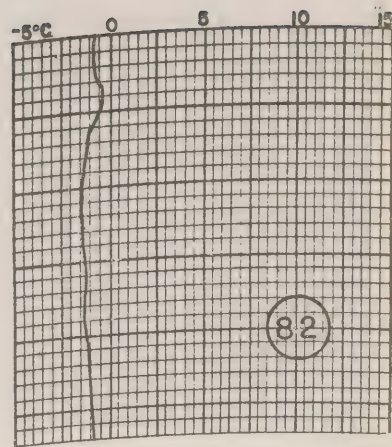
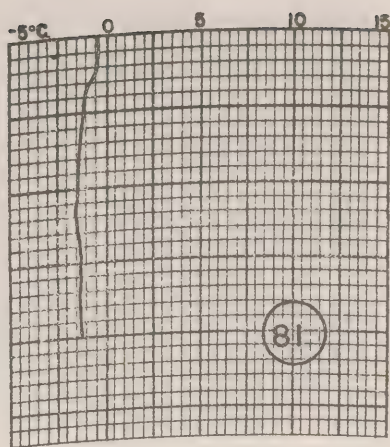
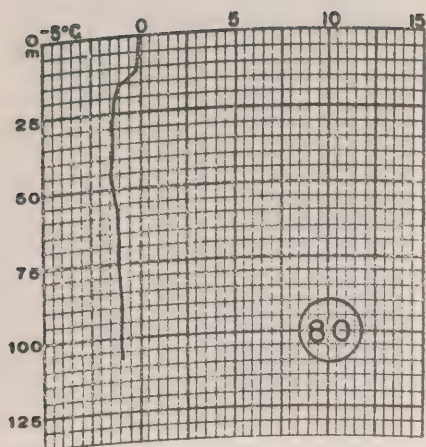


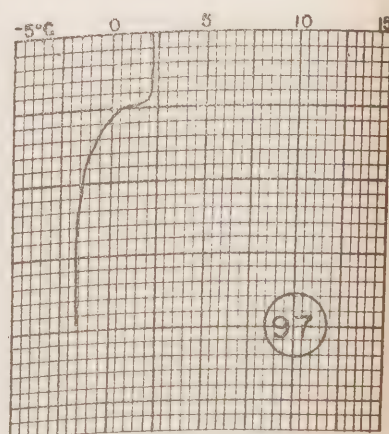
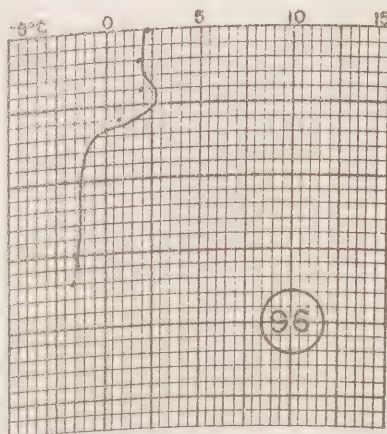
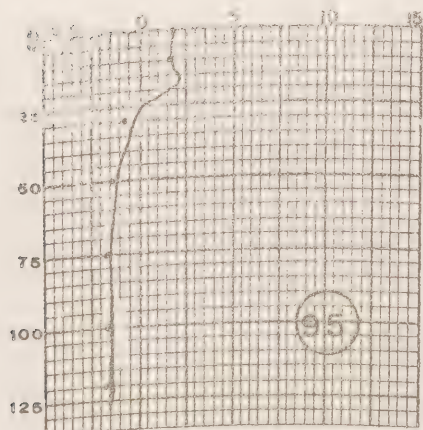
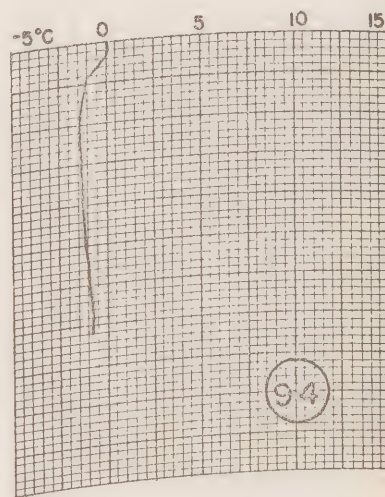
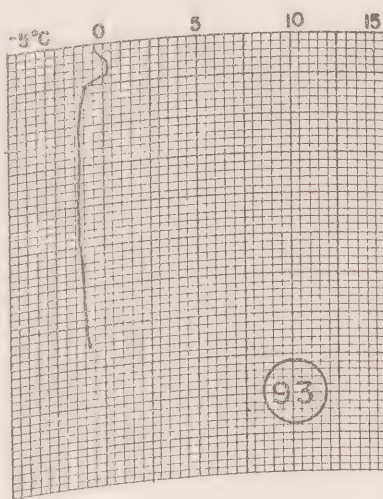
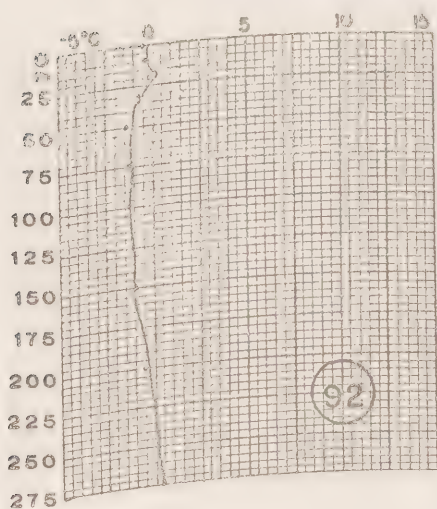
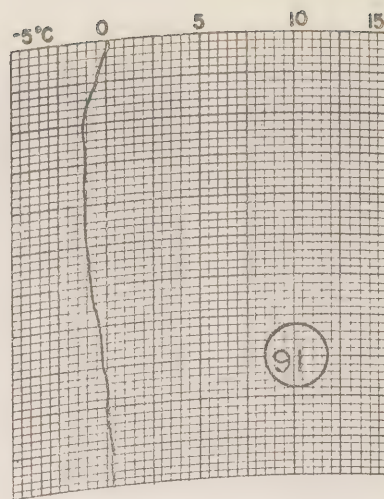
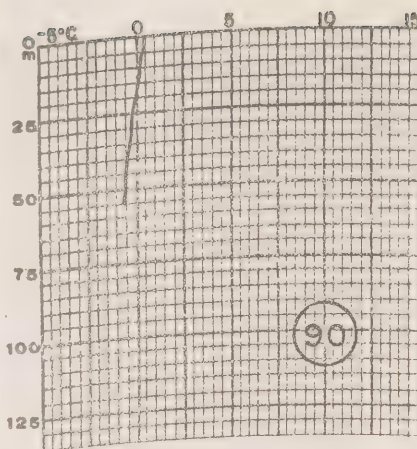
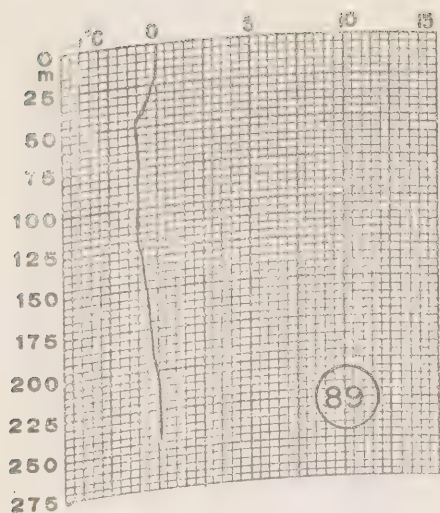


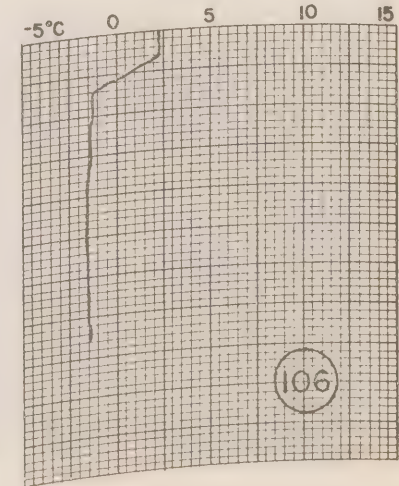
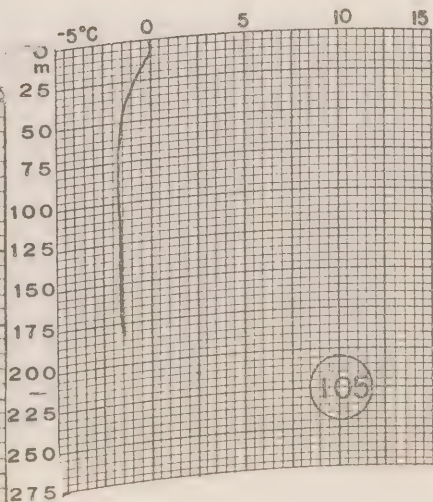
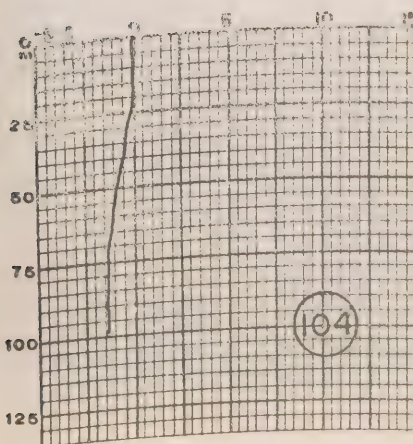
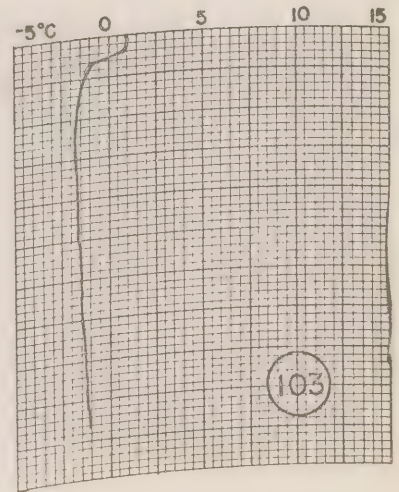
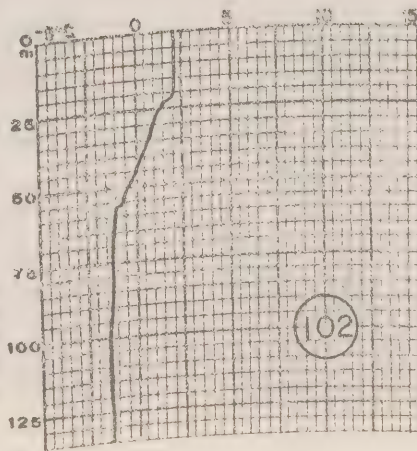
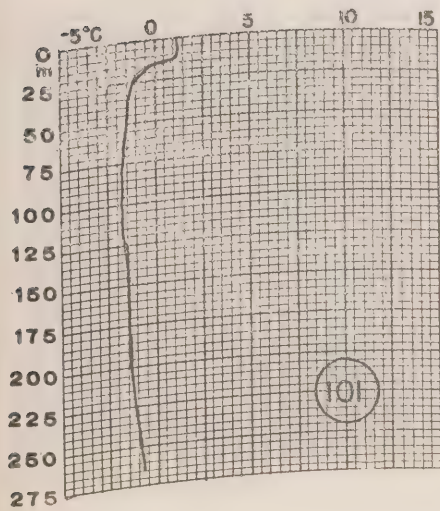
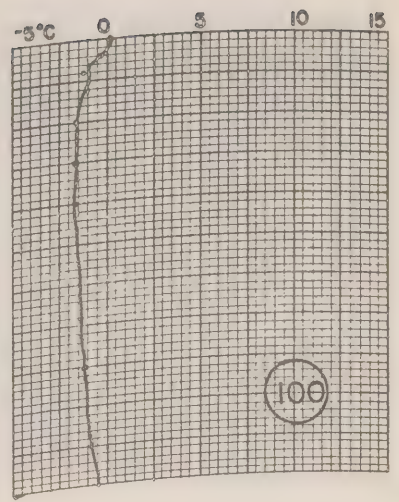
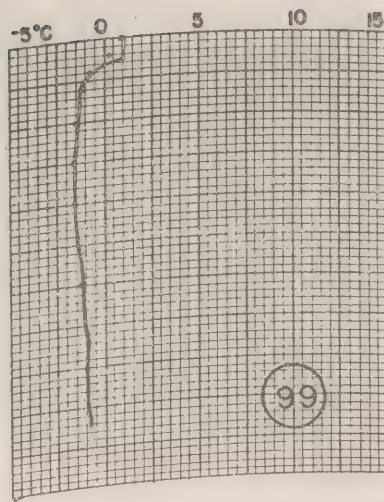
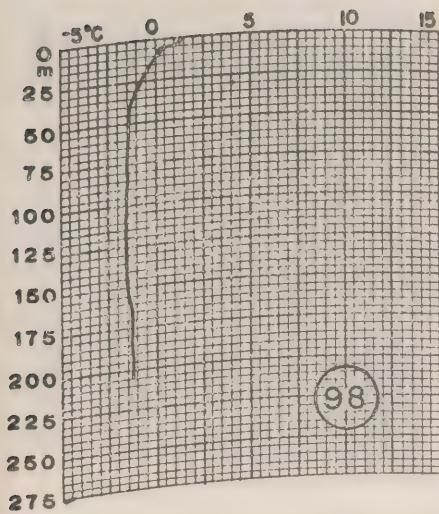


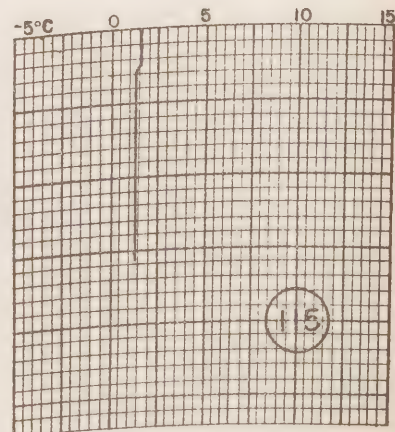
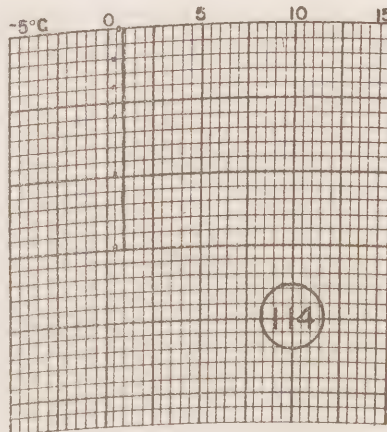
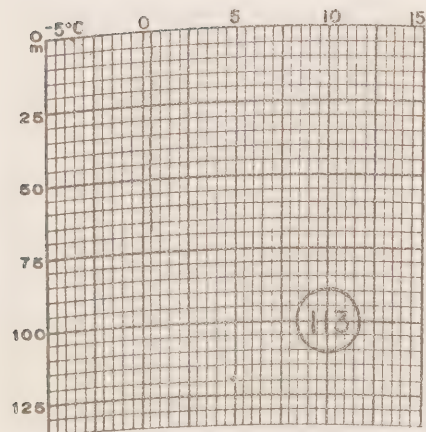
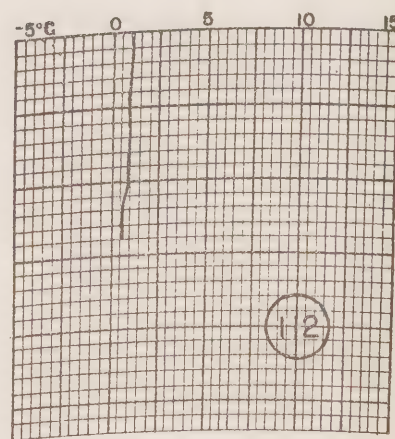
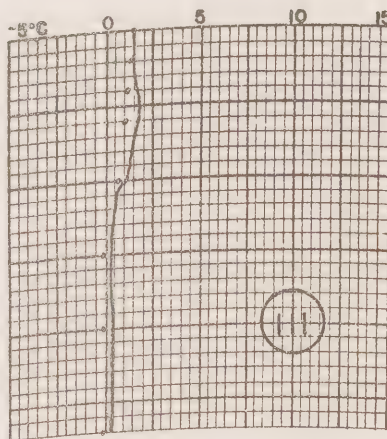
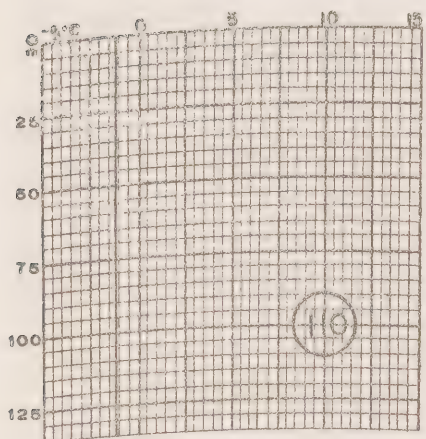
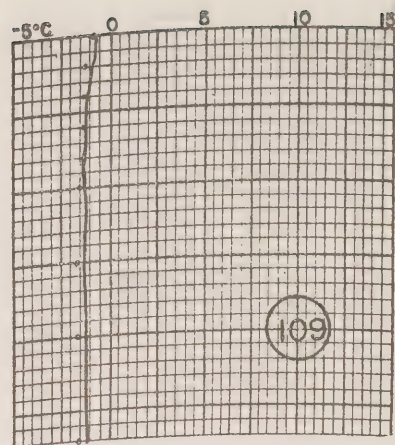
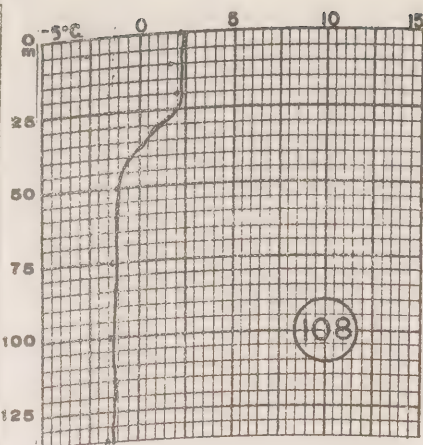
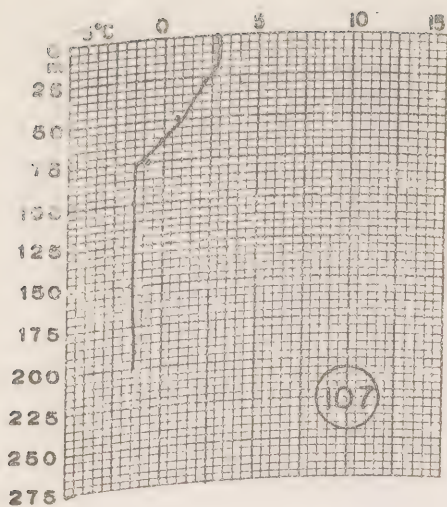


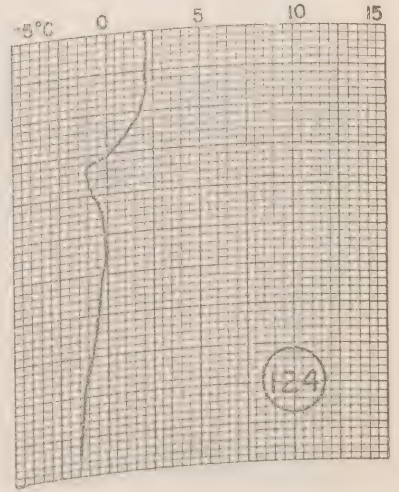
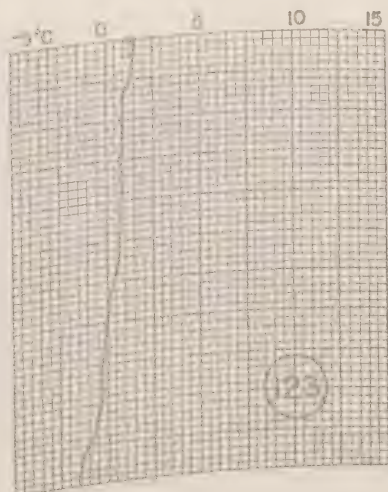
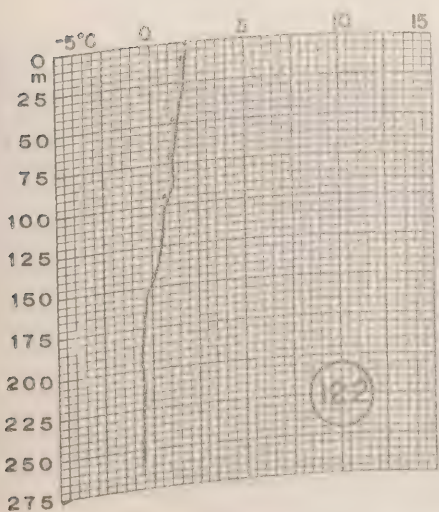
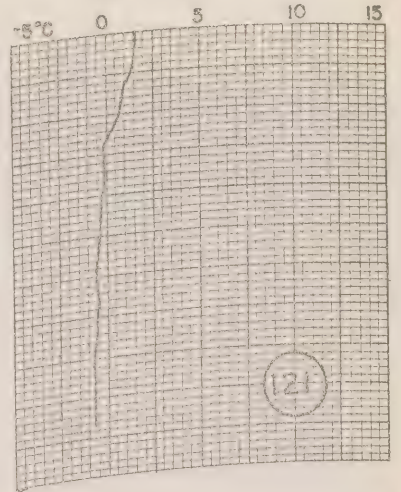
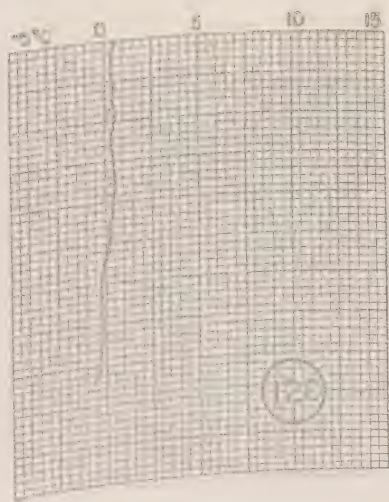
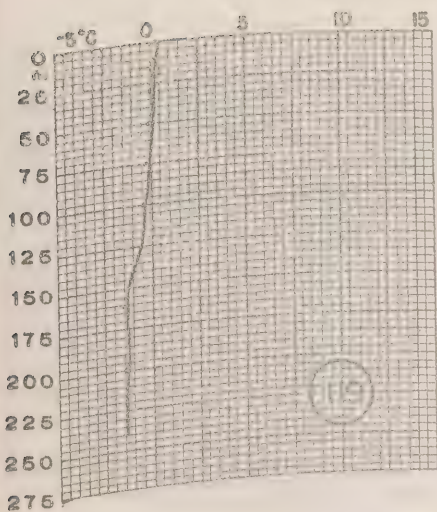
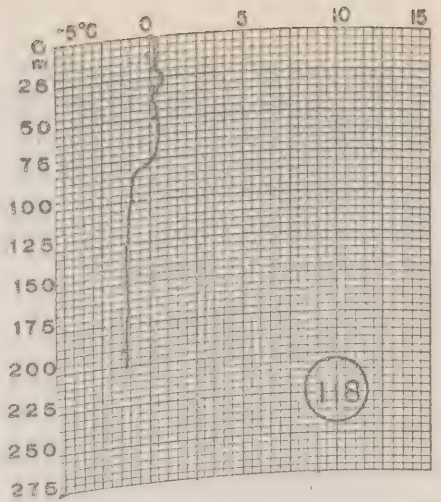
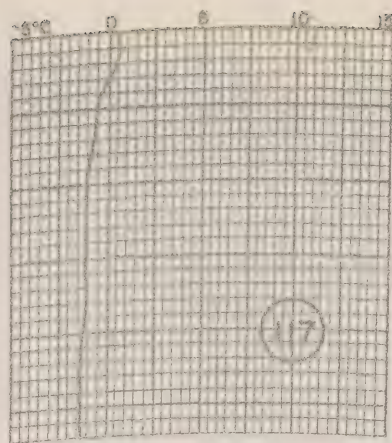
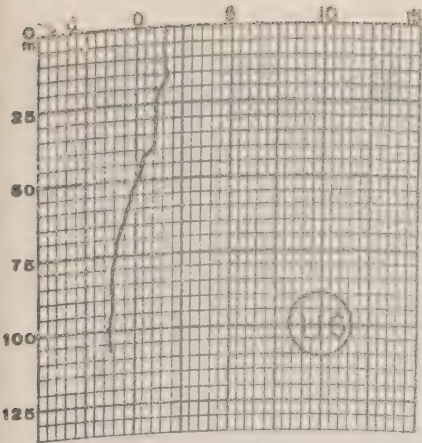


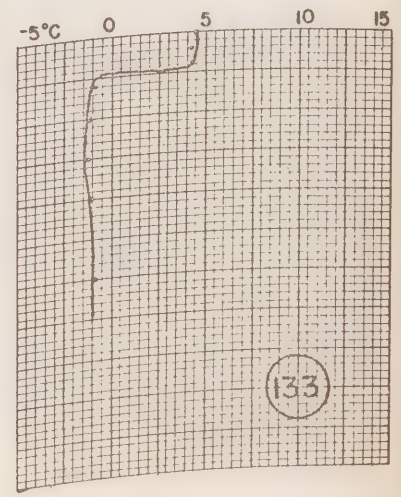
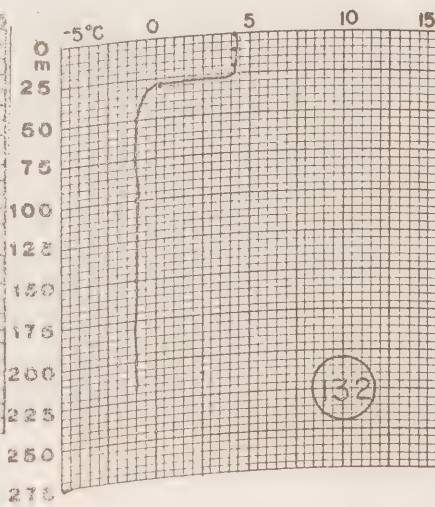
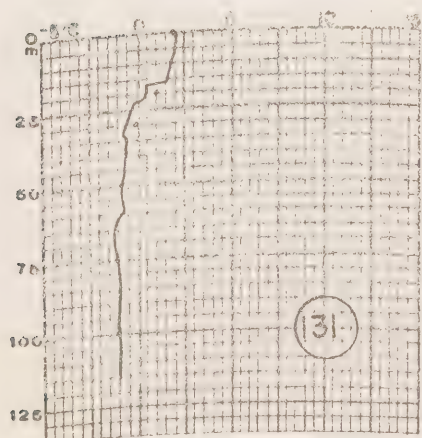
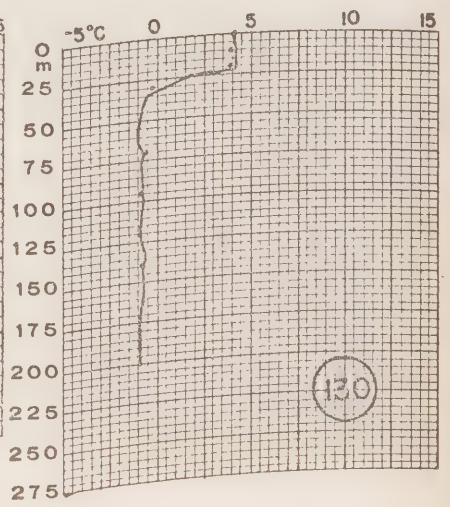
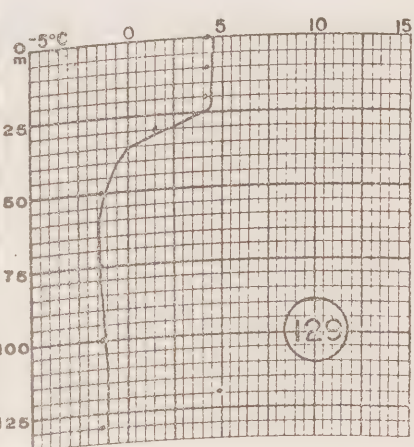
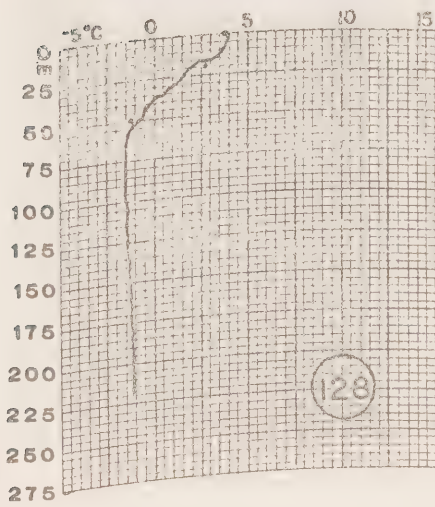
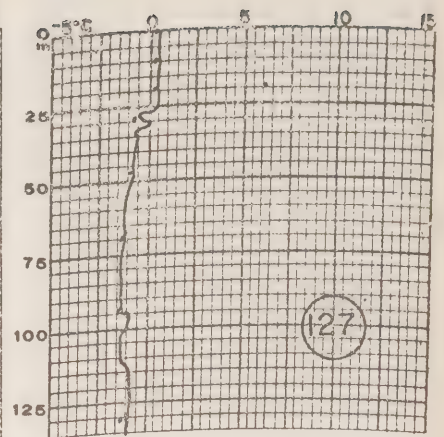
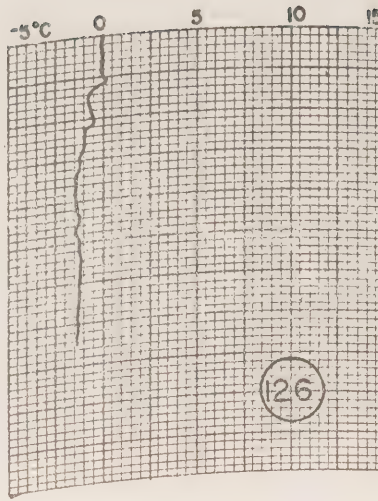
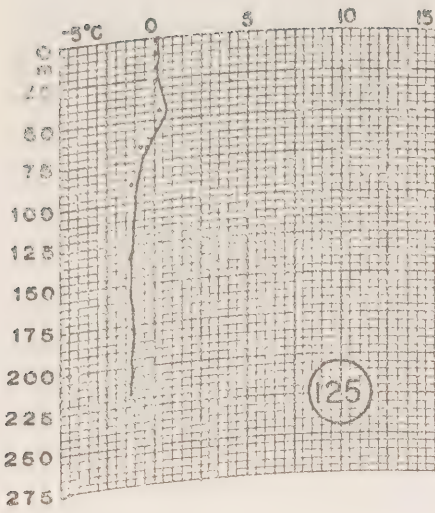


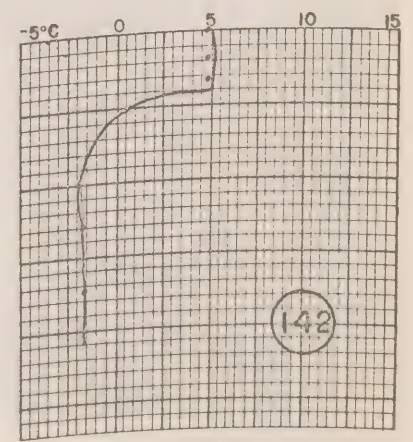
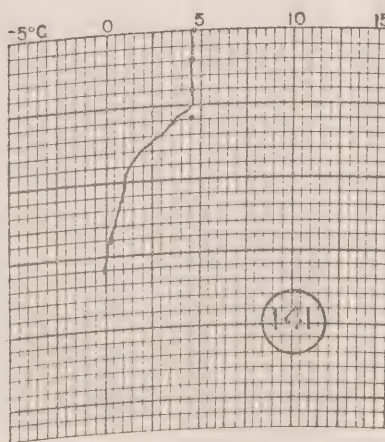
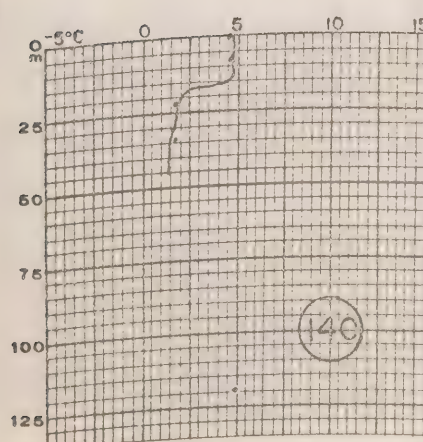
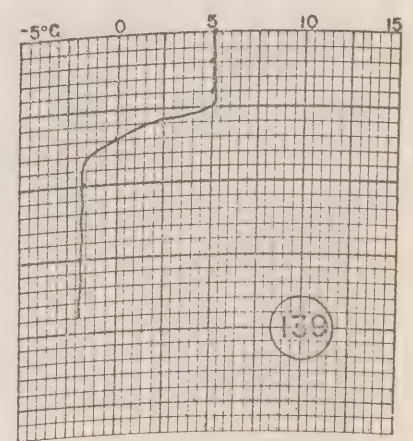
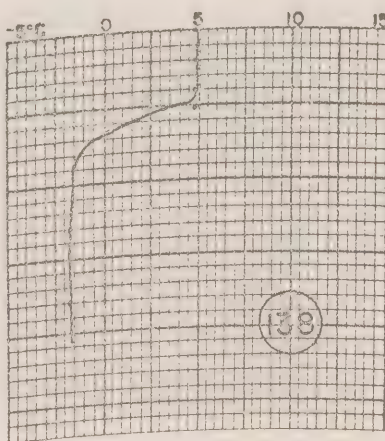
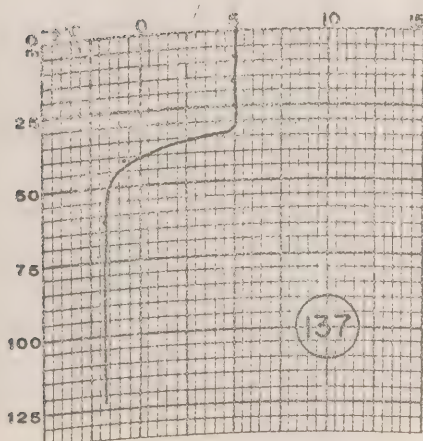
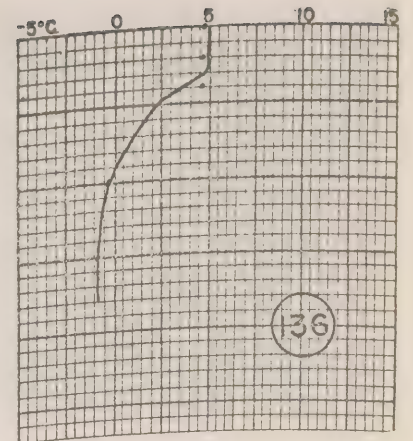
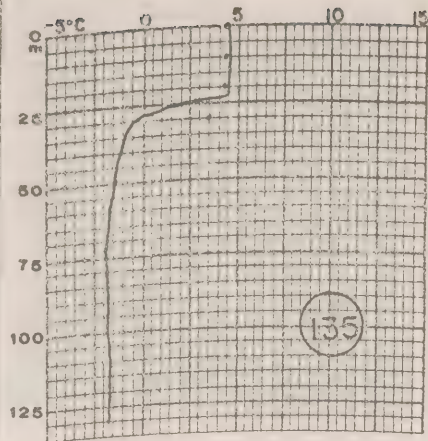
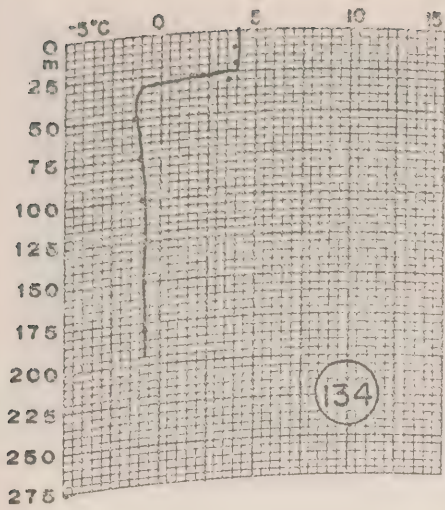


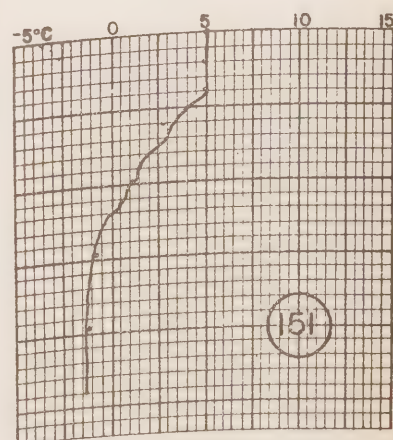
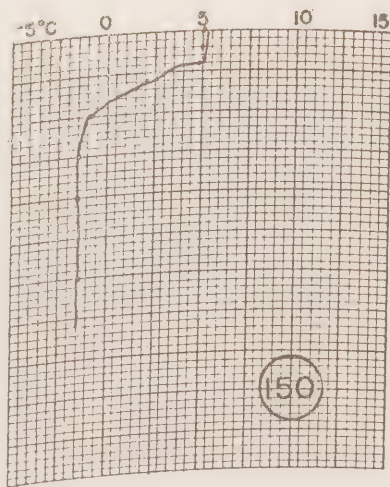
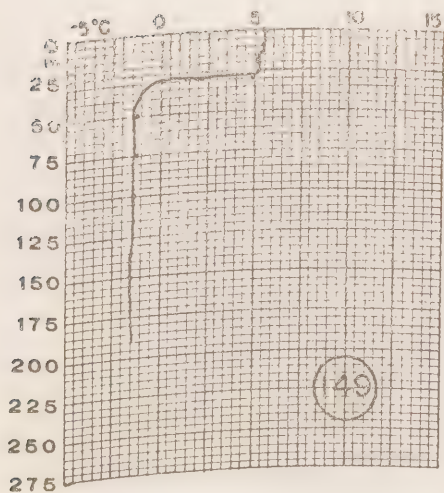
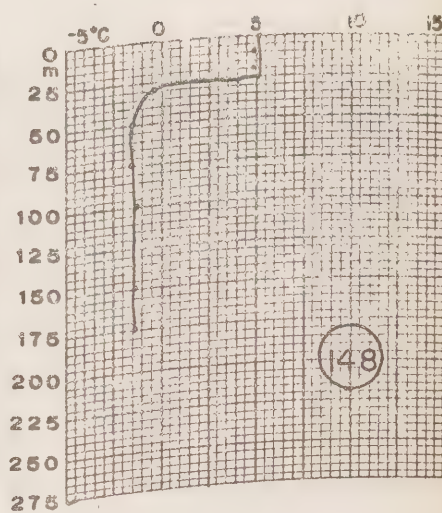
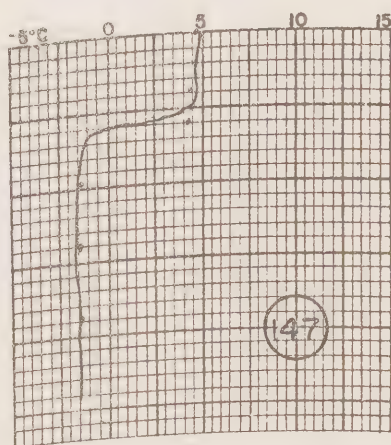
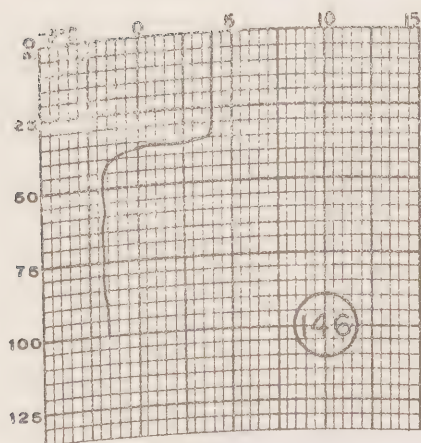
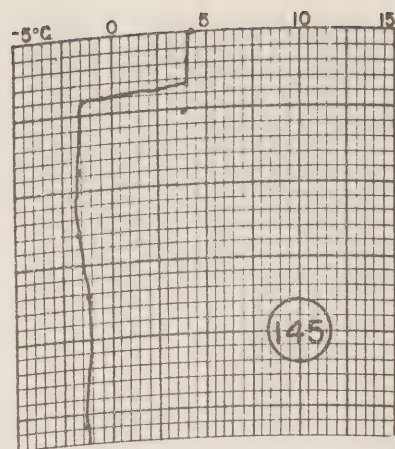
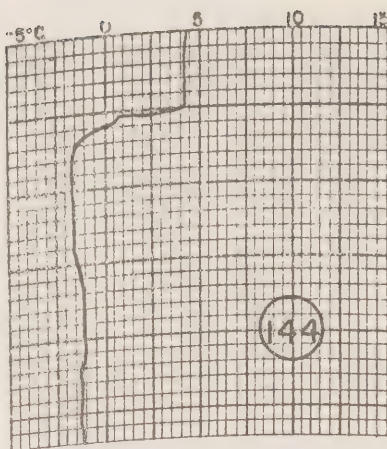
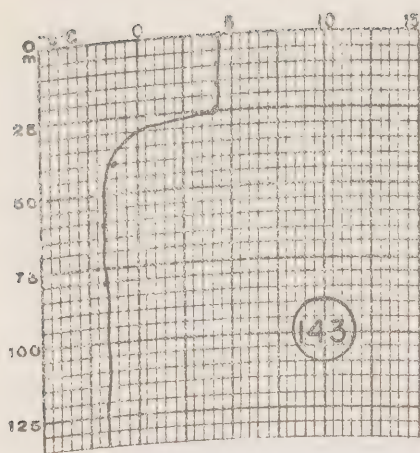


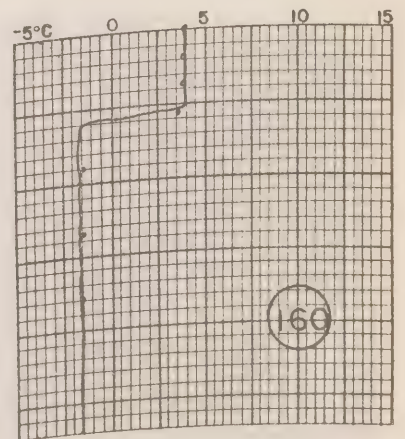
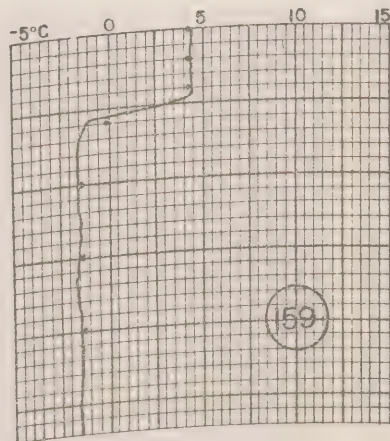
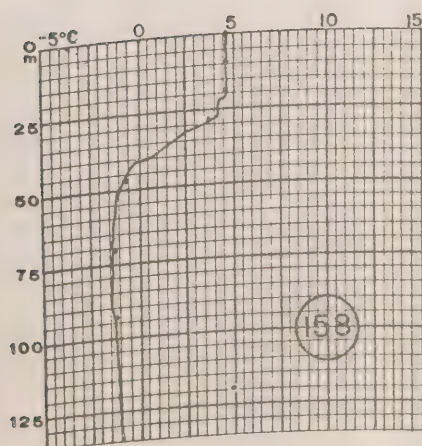
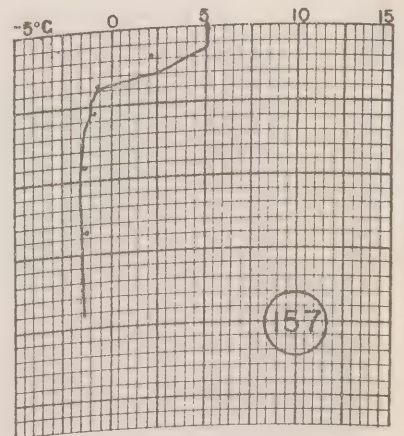
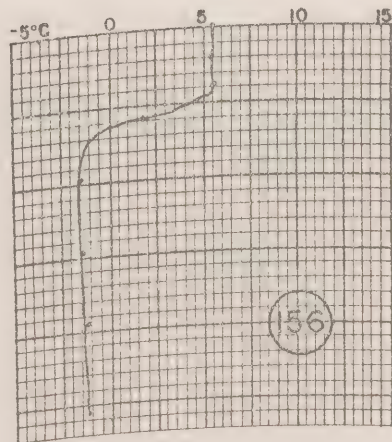
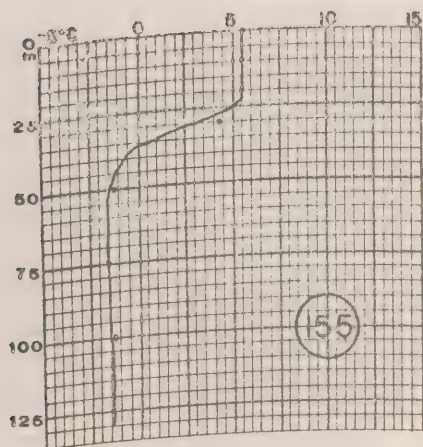
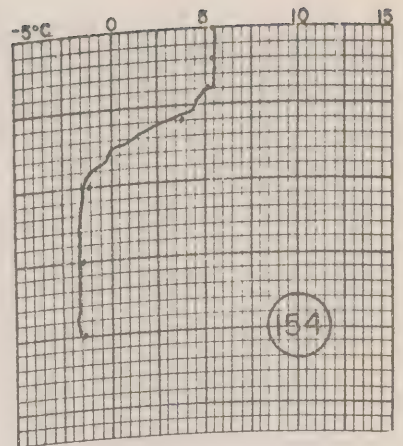
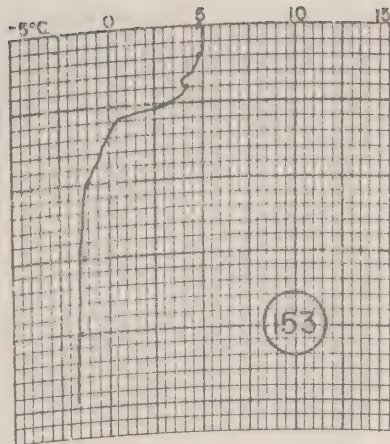
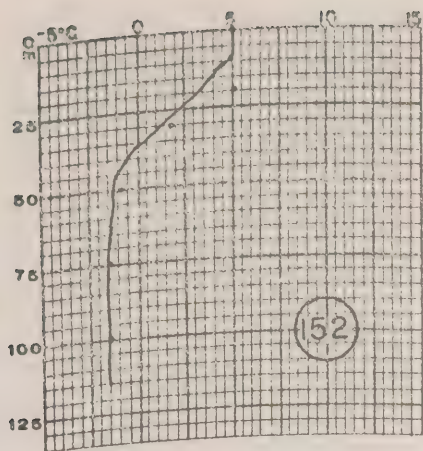


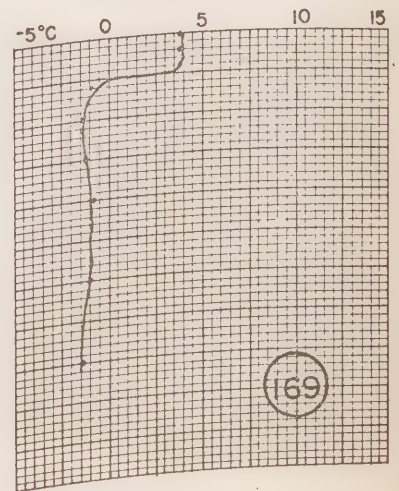
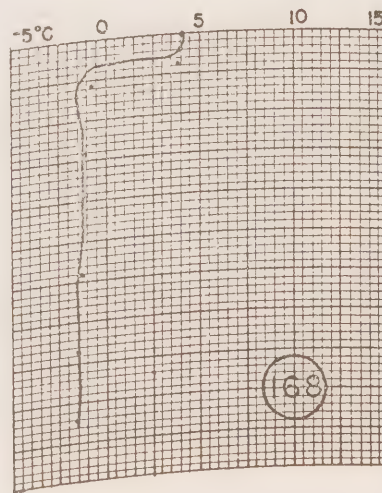
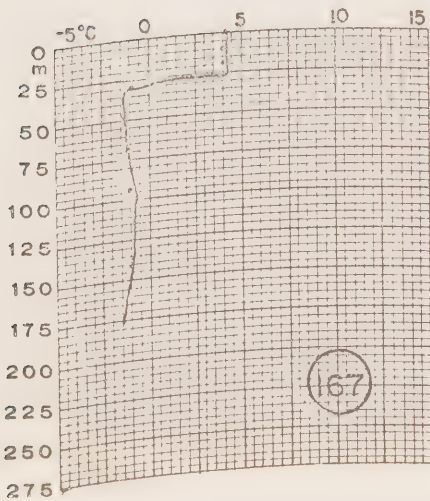
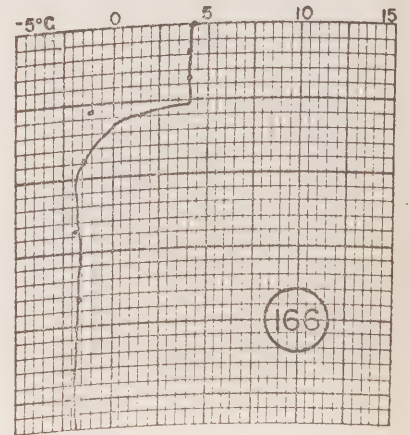
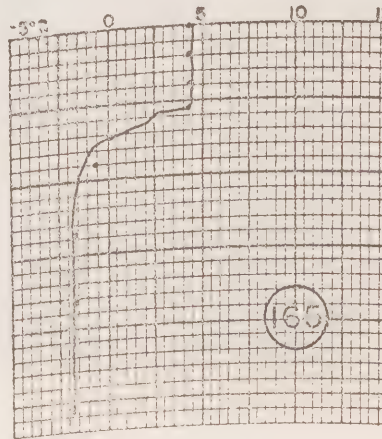
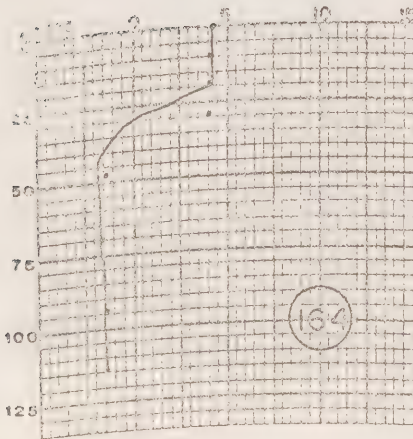
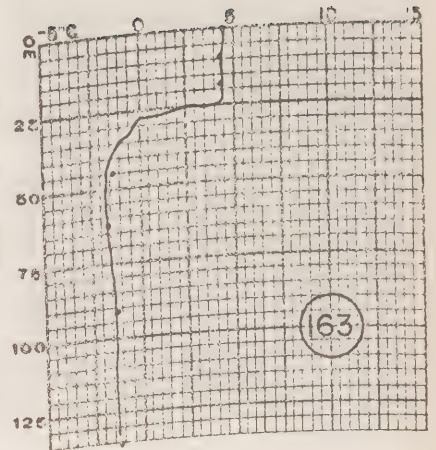
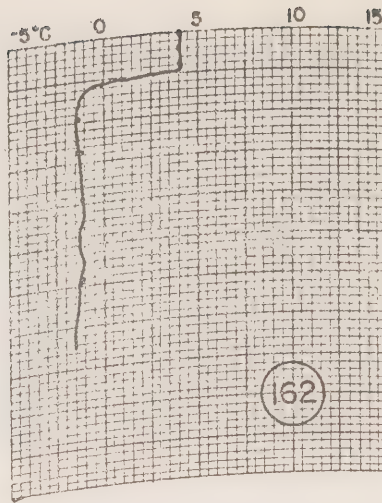
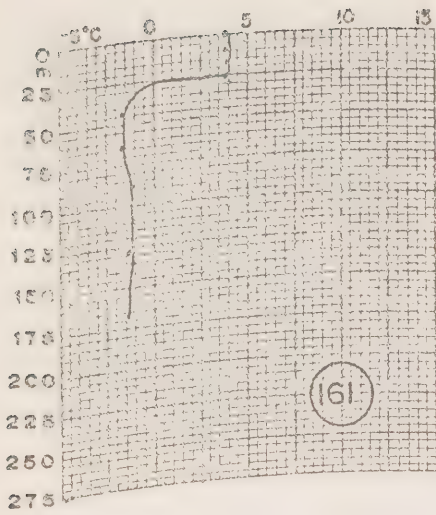


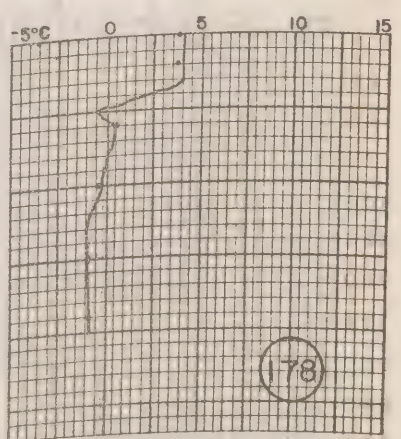
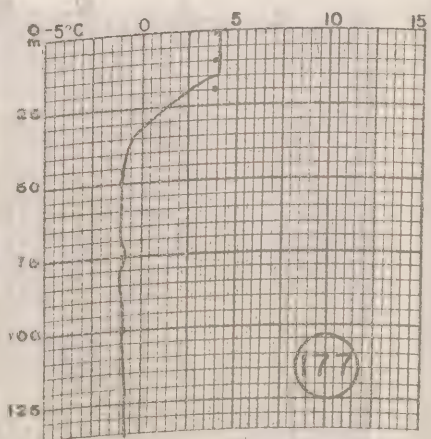
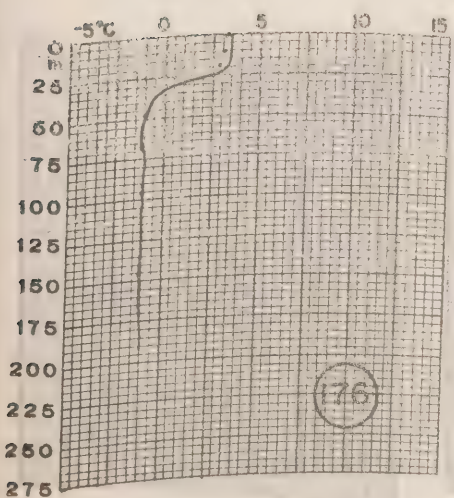
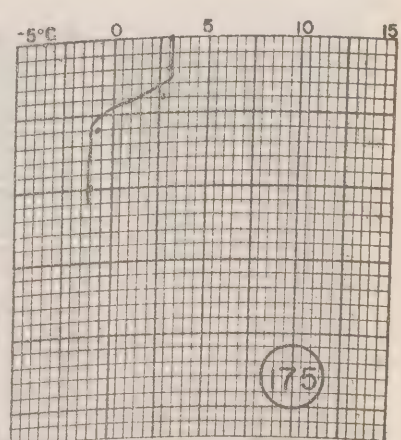
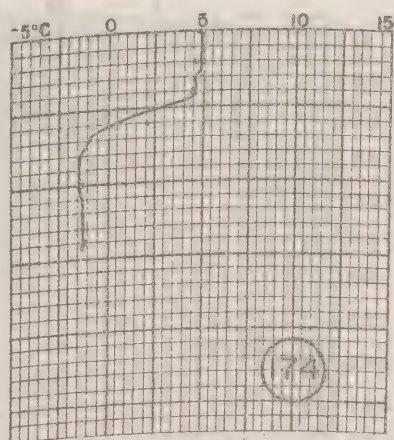
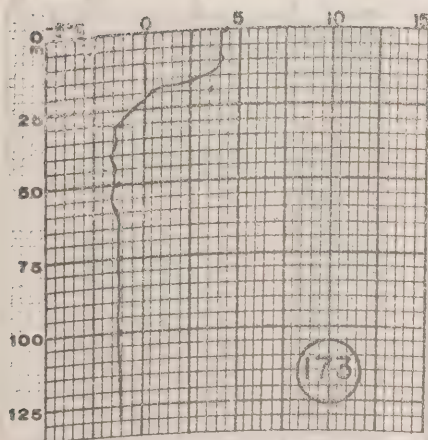
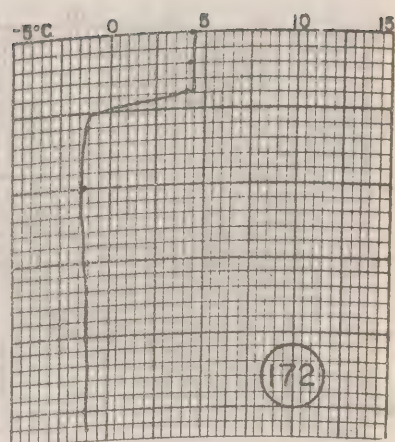
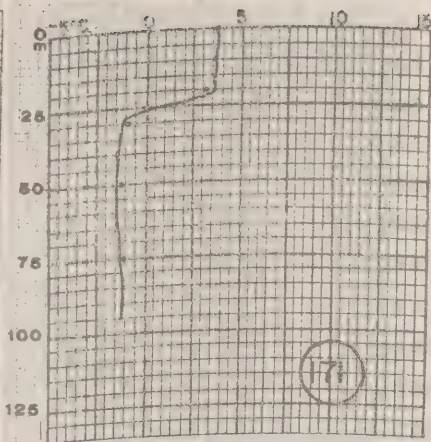
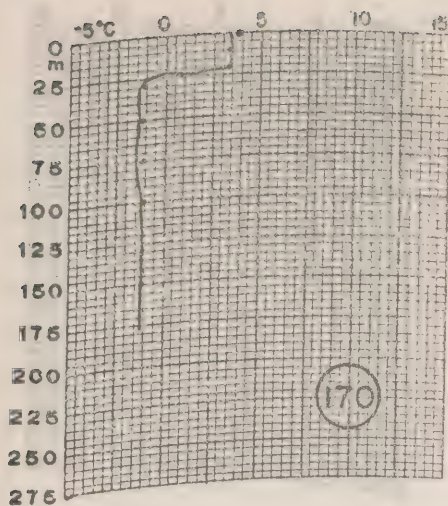


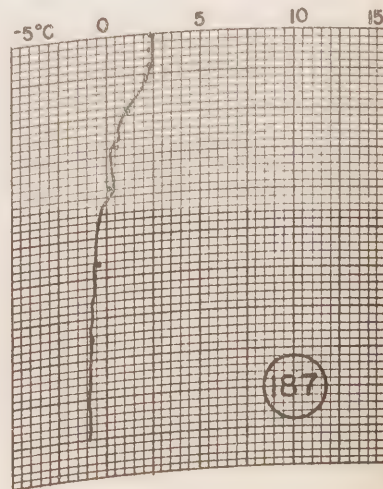
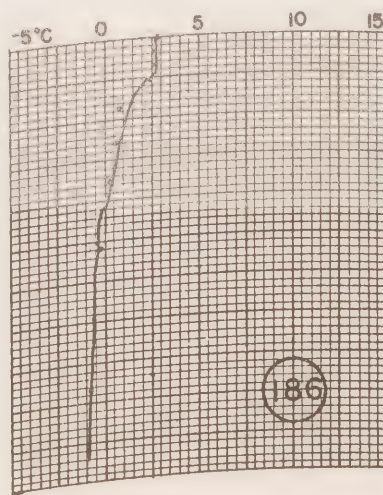
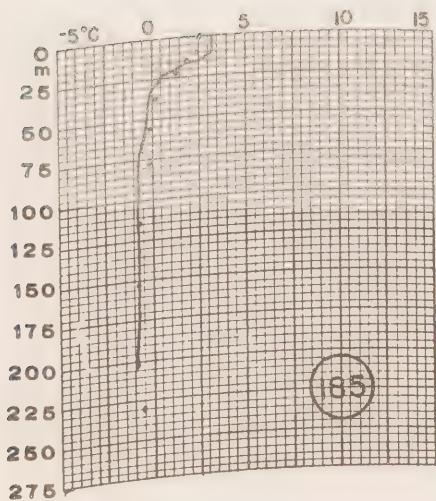
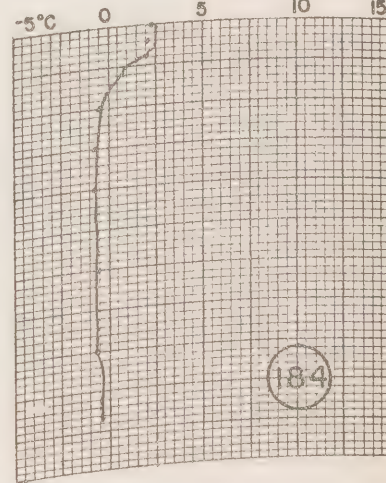
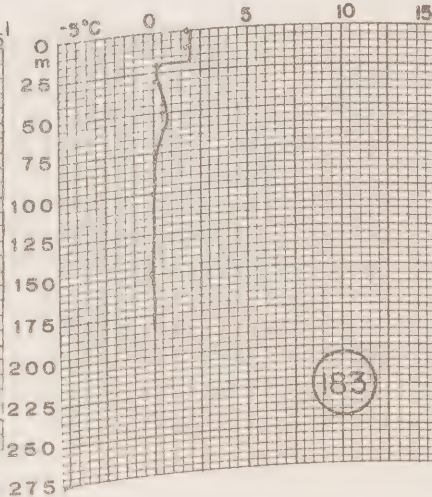
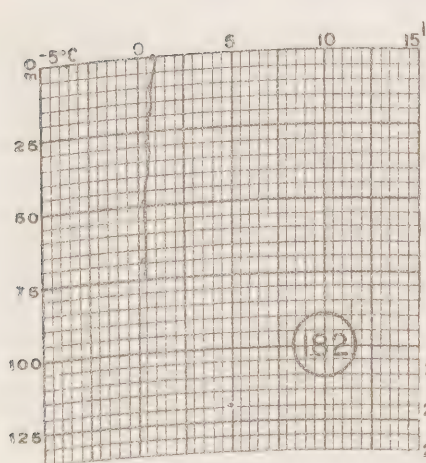
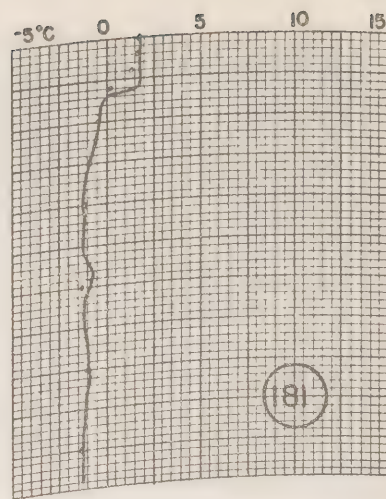
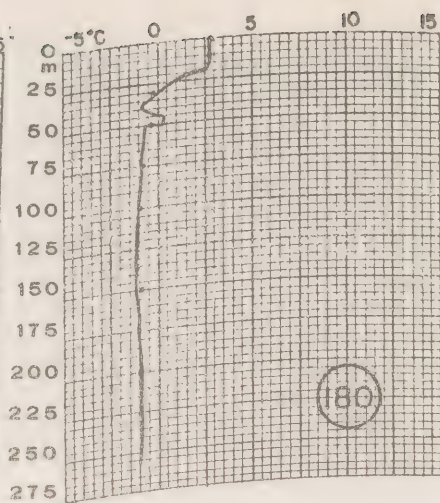
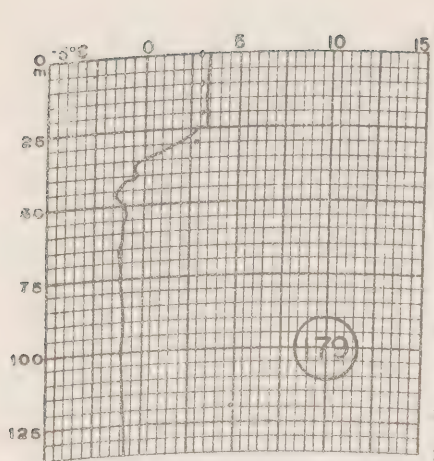


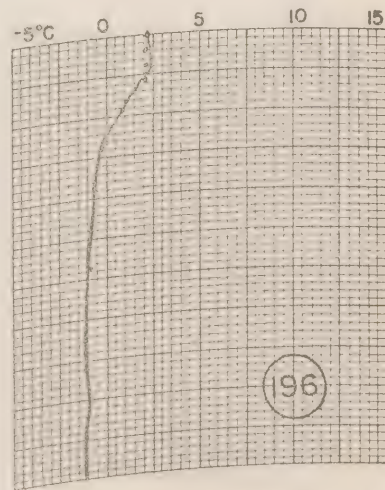
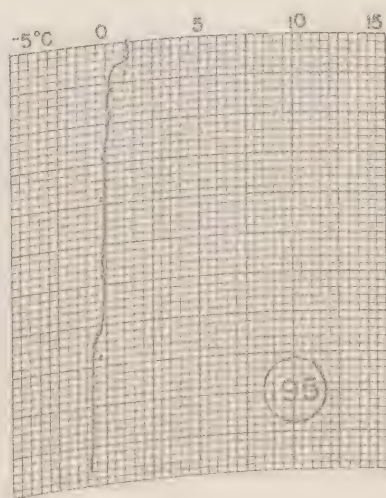
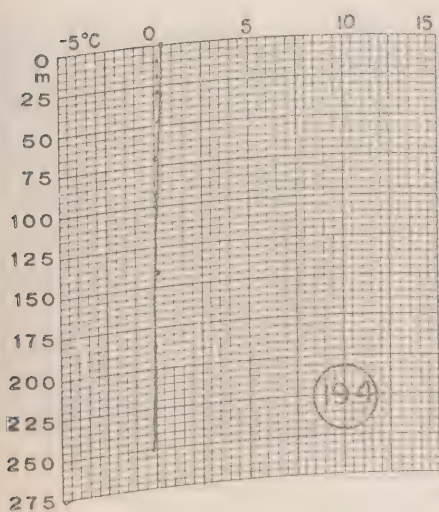
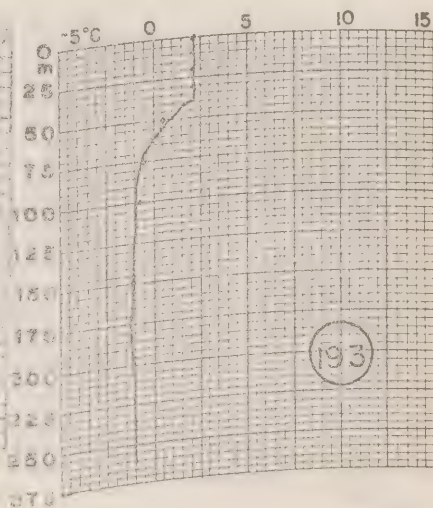
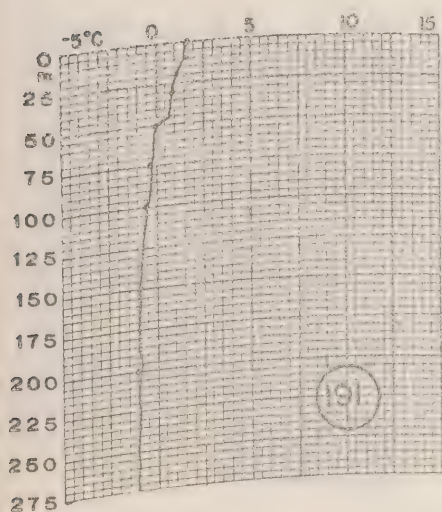
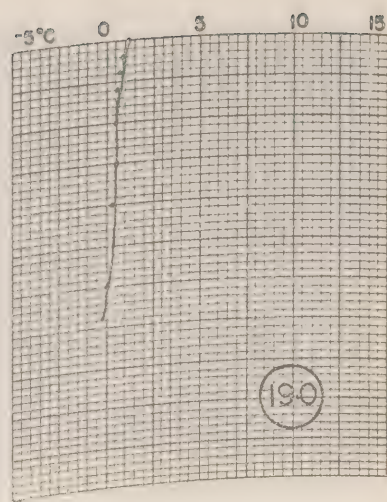
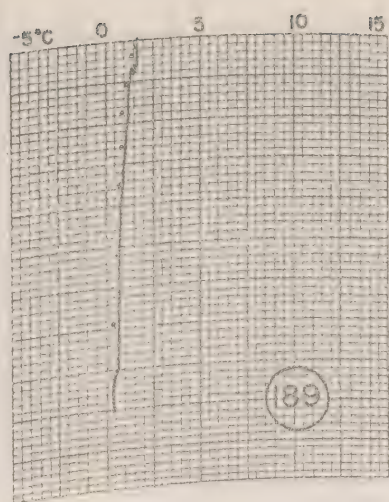
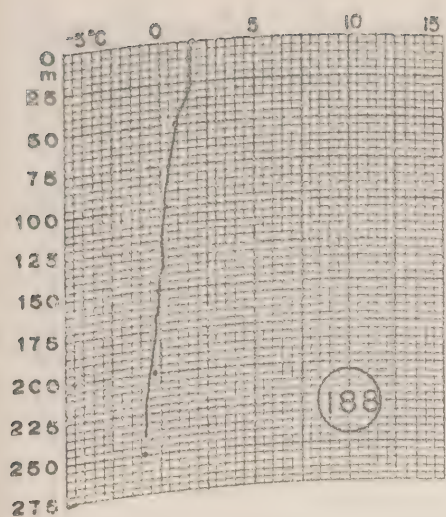


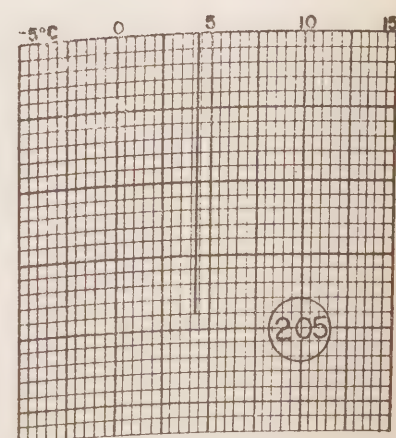
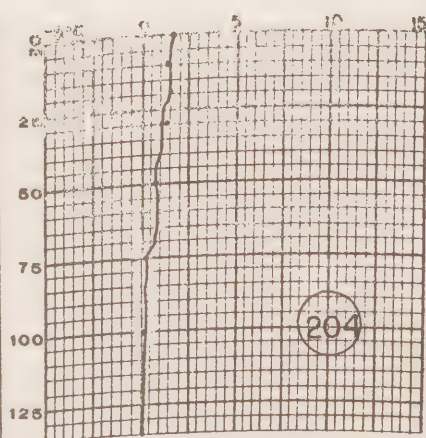
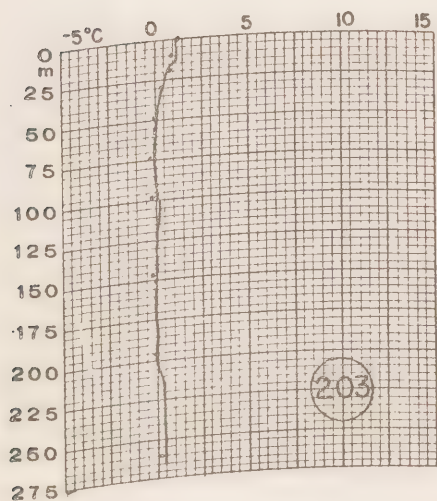
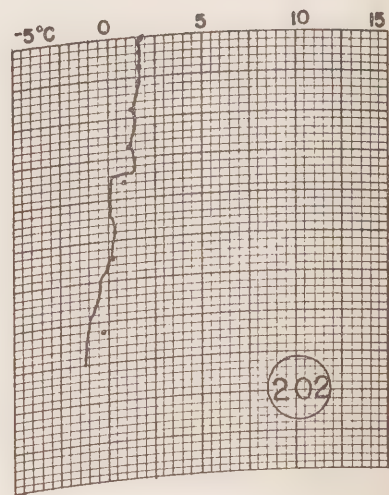
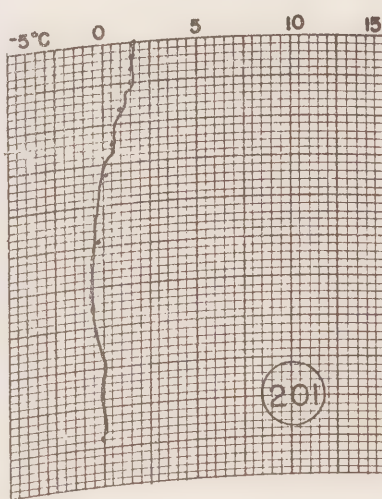
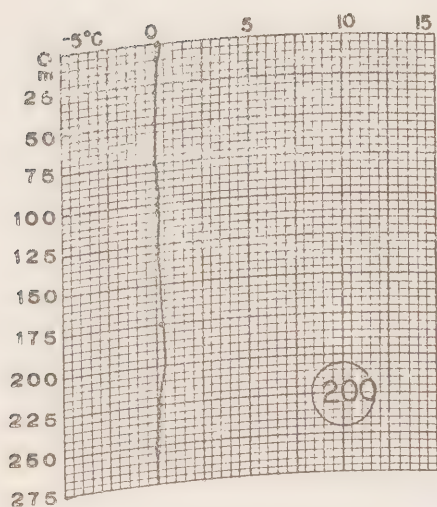
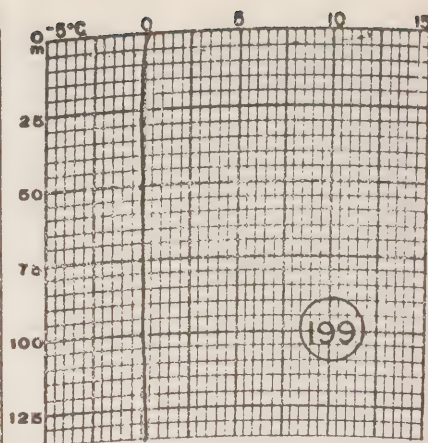
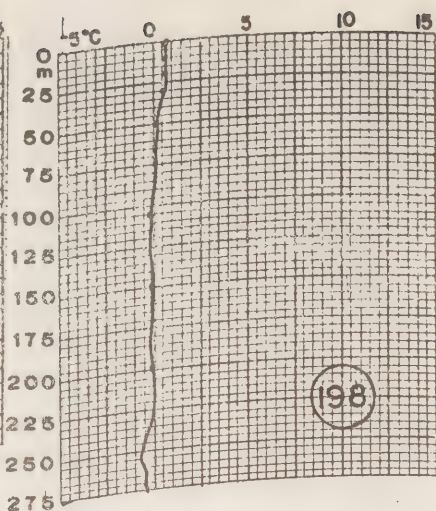
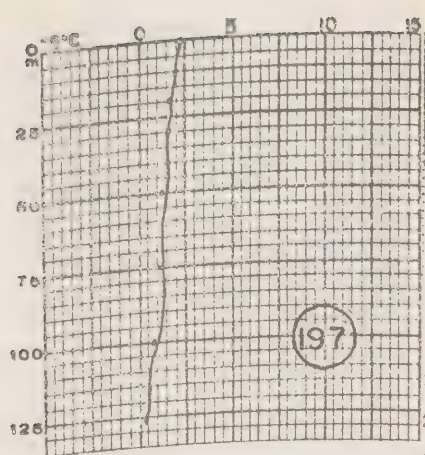


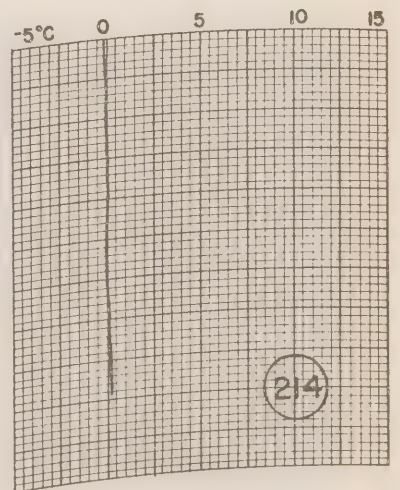
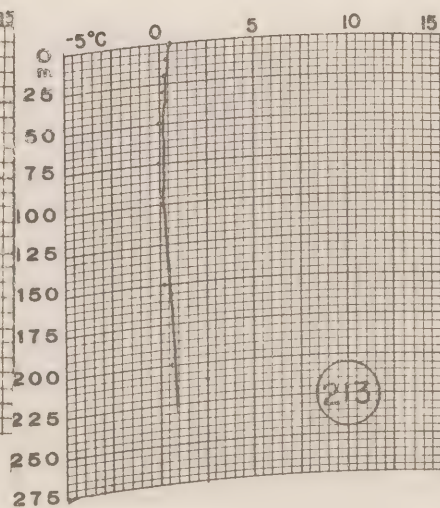
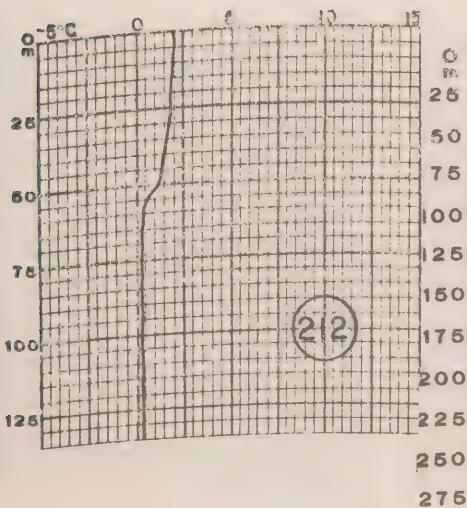
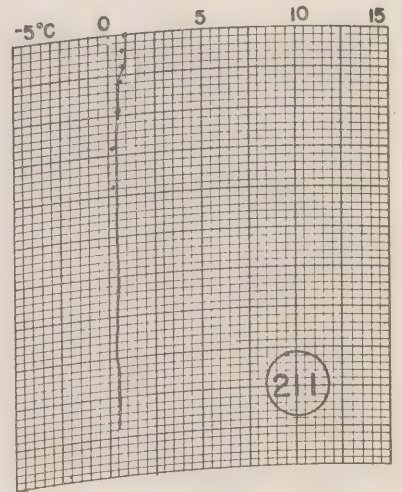
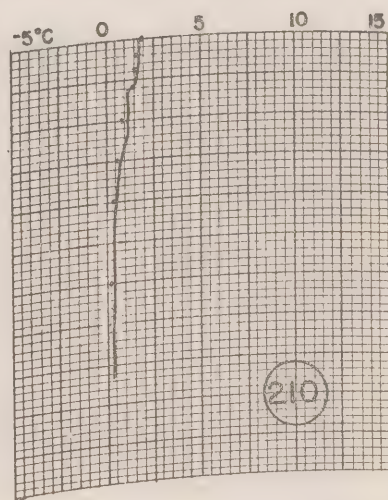
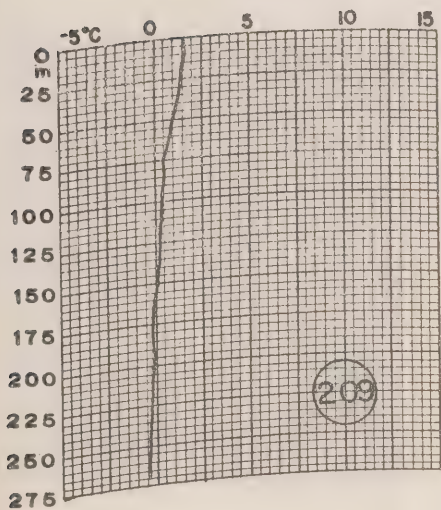
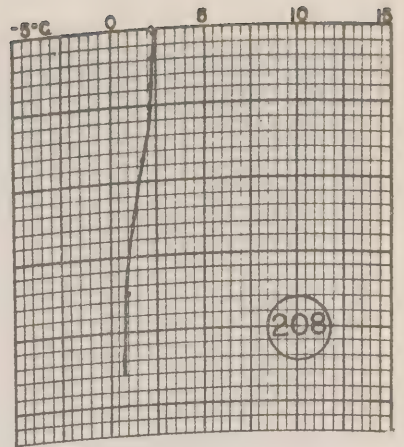
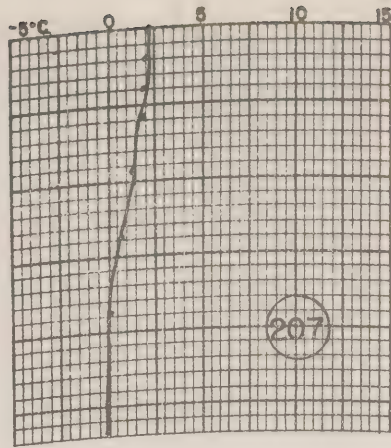
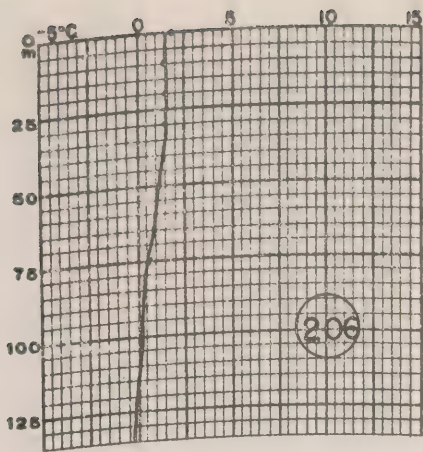


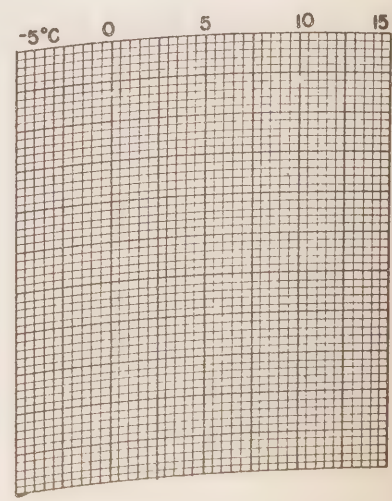
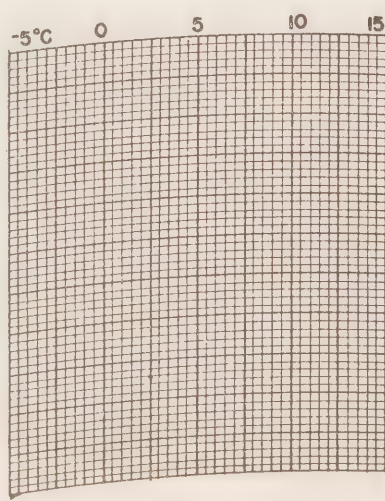
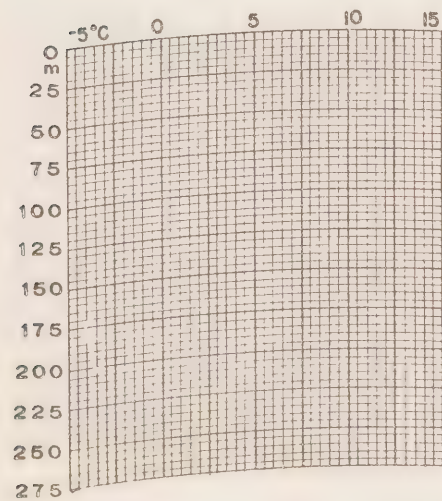
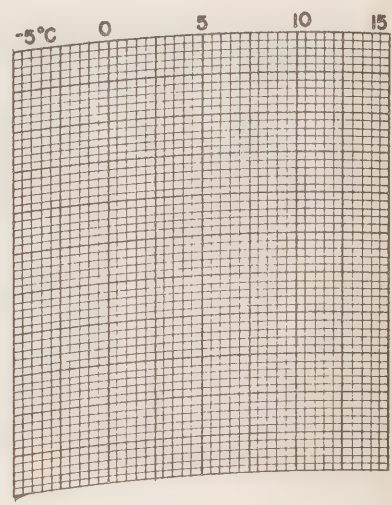
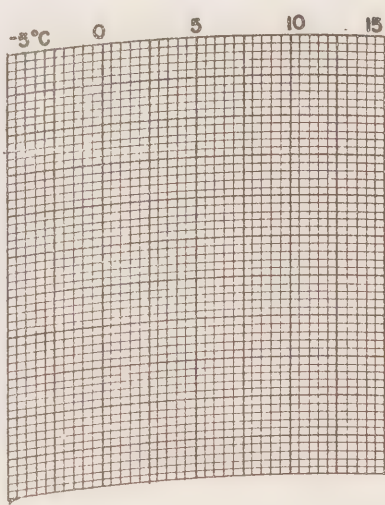
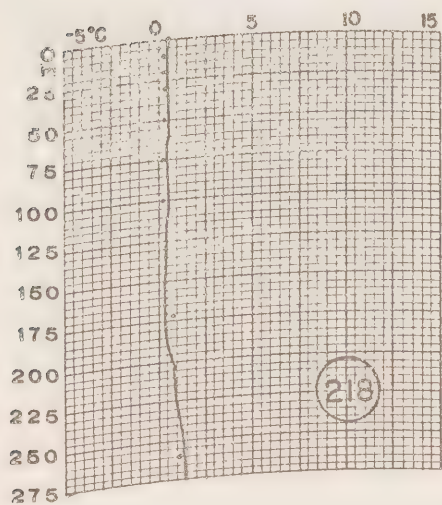
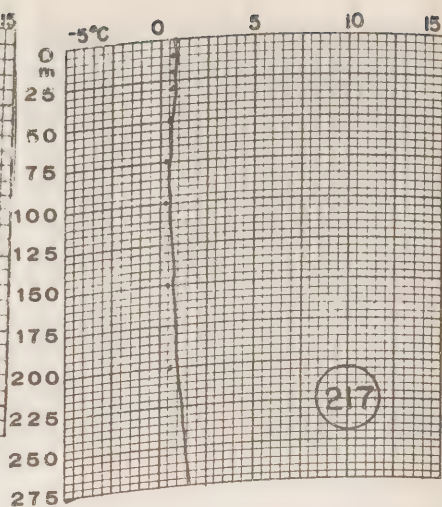
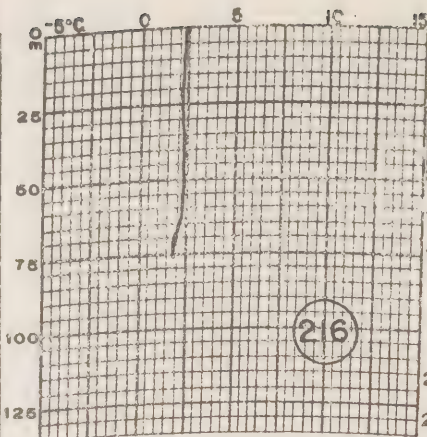
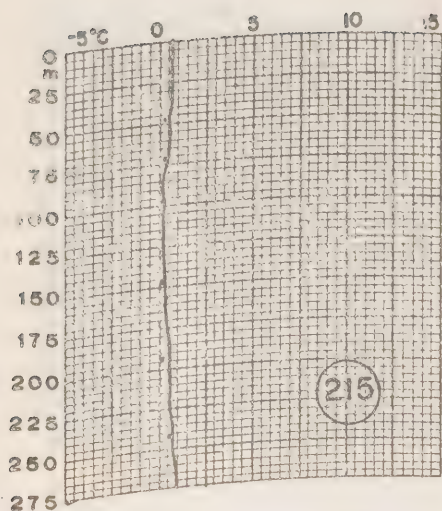










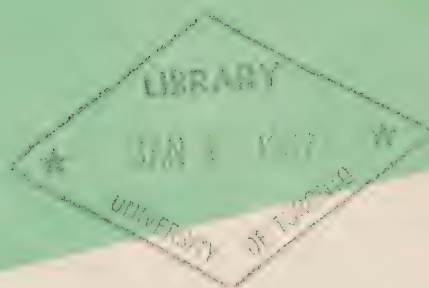


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CANADA



OCEAN WEATHER STATION 'P' NORTH PACIFIC OCEAN

July 2 to September 22, 1965

No. 5

1966 Data Record Series

Canadian Oceanographic Data Centre

Programmed by the
Canadian Committee on Oceanography

1966

ROGER DUHAMEL, F. R. S. C.
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OCEAN WEATHER STATION 'P'

NORTH PACIFIC OCEAN

July 2 to September 22, 1965

CODC Reference: 02-65-006

No. 5

1966 Data Record Series

Canadian Oceanographic Data Centre
615 Booth St., Ottawa, Canada

Programmed by the Canadian Committee on Oceanography

FISHERIES RESEARCH BOARD OF CANADA

Ocean Weather Station "P" North Pacific Ocean

Ships:	CCGS "St. Catharines"	CCGS "Stonetown"
Local Cruise designations:	P-65-3	Patrol No. 66
Cruise periods:	July 2 - August 12, 1965	August 7 - September 22, 1965
Observer:	R. B. Tripp	

PACIFIC OCEANOGRAPHIC GROUP - Nanaimo, B.C.

SECTION I

Description of data collection procedures



Figure 1.

The Canadian Weather Ship C.C.G.S. " St. Catharines ". (D.O.T. Photo)

The oceanographic winch is located on the starboard side of the signal deck, just aft of the bridge wing.



Figure 2.

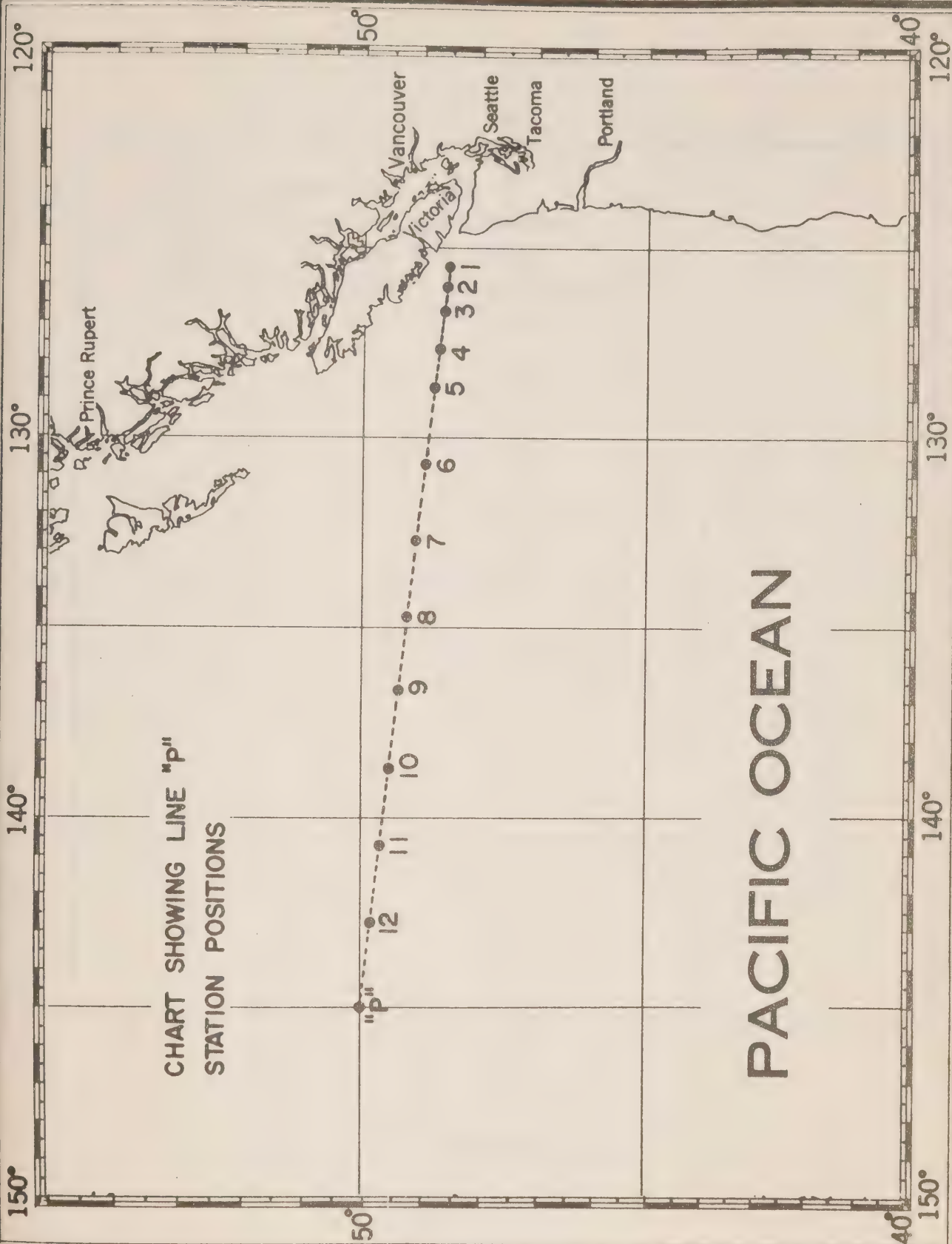
The Canadian Weather Ship C.C.G.S. "Stonetown".

(D.O.T. Photo)

Bathymograph soundings boom can be seen below the bridge on the signal deck.

CHART SHOWING LINE "P"
STATION POSITIONS

PACIFIC OCEAN



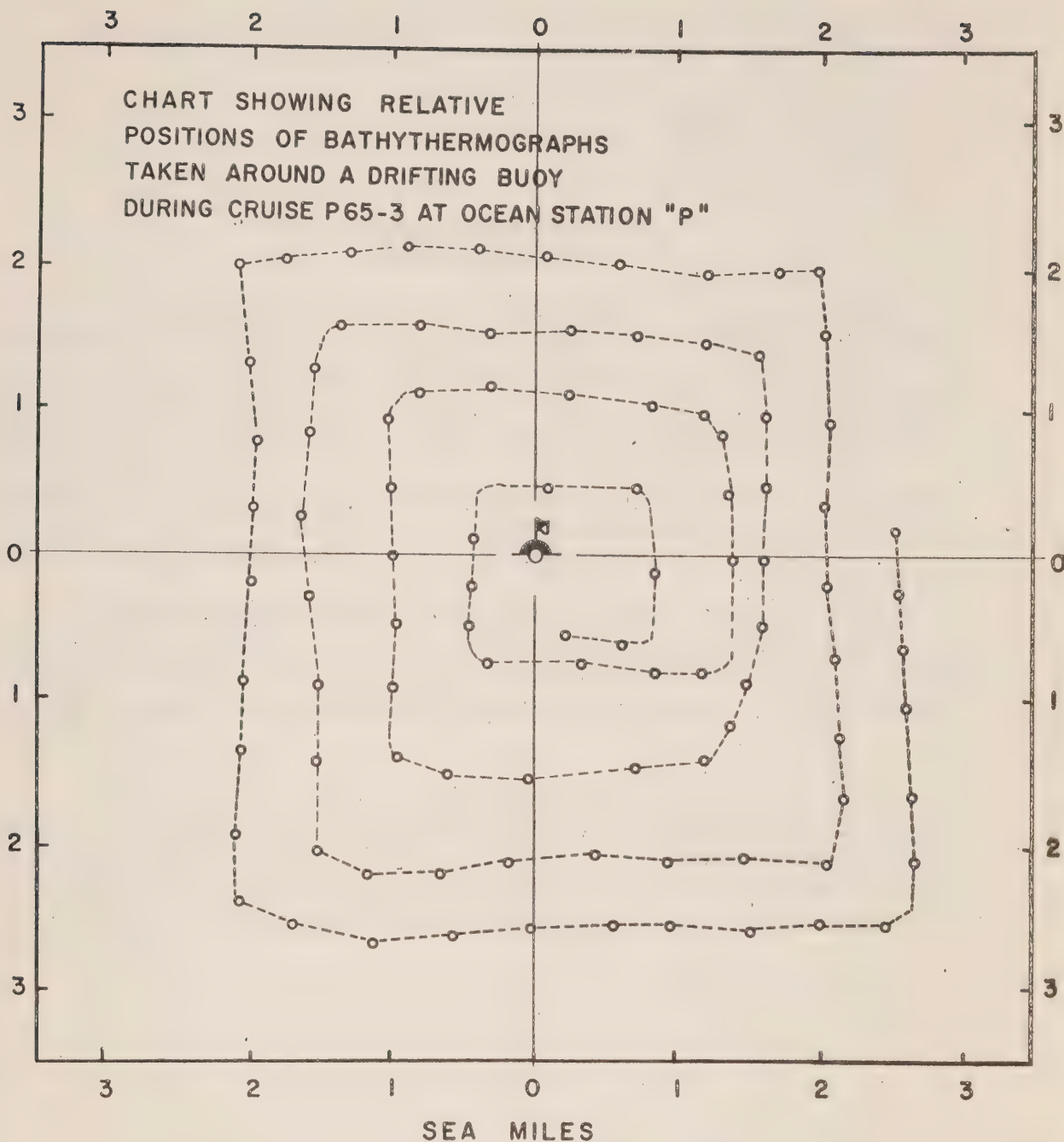


Figure 4

INTRODUCTION

Canadian operation of Ocean Weather Station "P" (latitude 50°00'N, longitude 145°00'W) was inaugurated in December 1950. The Station is manned by two vessels of the Canadian naval frigate class operated by the Marine Services of the Department of Transport. They are the CCGS "St. Catharines" and the CCGS "Stonetown" (Fig. 1 and 2) (Atlantic Oceanographic Group, MS, 1961). Each ship remains on Station for a period of 6 weeks, and is then relieved by the alternate ship, thus maintaining a continuous watch. The chief purpose of the Station is to operate as a meteorological station for surface and upper-air observations, and as an air-sea rescue station.

Bathythermograph observations have been made at Station "P" since July 1952. A program of more extensive oceanographic observations was commenced in August 1956. Since April 1959, a series of oceanographic stations has been frequently observed along the route between Station "P" and Swiftsure Bank (Fig. 3).

The CCGS "St. Catharines" is equipped with deck and laboratory facilities required to make bathythermograph and oceanographic observations. Oceanographers from the Pacific Oceanographic Group accompany the ship on each patrol. The CCGS "Stonetown" is equipped with bathythermograph equipment only. The BT observations on both ships are made by members of the ship's crew.

CRUISE LOG, CCGS "ST. CATHARINES", SURVEY P-65-3

- July 2: departed from Esquimalt, B.C.; observed 10 oceanographic stations en route to Ocean Station "P".
- July 5: relieved CCGS "Stonetown", and commenced regular oceanographic observations program, including plankton hauls and other productivity measurements.
- August 2: carried out a special program of BT casts every 5 minutes for 8 hours at Station "P".
- August 9: rendezvous with "Stonetown", and proceeded on return trip to base; 12 oceanographic stations observed enroute.
- August 12: berthed at Esquimalt, B.C.

OCEANOGRAPHIC STATION OBSERVATIONAL PROCEDURES

1. Samples at depths were obtained with Nansen reversing water sample bottles. Stations to 400 m depth were observed in one cast; stations to 2000 m were observed in two casts: 10 to 400 m, and 500 m to the deepest depth; stations to 4200 m were observed in 2 casts: 10 to 500 m, and 600 m to the deepest depth.
2. Seawater temperatures (except 0 m) were measured with protected reversing thermometers of German or Japanese manufacture. The arrangement of the thermometers on the water sample bottles was as follows: 10 to 125 m, 2 protected thermometers at each depth; 150 to 250 m, 3 protected thermometers at each depth; 300 m to deepest bottle, 2 protected and one unprotected thermometer at each depth.
3. Surface samples (0 m) for salinity and dissolved oxygen determinations were obtained in a one-gallon plastic bucket. The surface temperature was measured in this sample with an armoured thermometer graduated in 0.5°C intervals.
4. Water transparency observations were made with a white secchi disc of 30 cm diameter.
5. Station locations were determined by the officers of the watch, who also made the meteorological observations reported with the oceanographic data.

LABORATORY PROCEDURES

The salinity determinations of the oceanographic station water samples and the surface samples collected during Survey P-65-3 were made with an inductive salinometer, Model 601 MK III, manufactured by Auto-Lab Industries Pty. Ltd., Sydney, Australia (Brown and Hamon, 1961). Most of the samples were analysed on board ship. The salinity data are the means of duplicate determinations whose "conductivity ratio" values fell within an acceptable range. The accuracy of the determinations at the 35‰ salinity level is stated to be ± 0.003 ‰ (Brown and Hamon, 1961). The surface samples collected during the "Stonetown" Patrol No. 66 were analysed in the shore laboratory using the MK III conductivity salinometer. These data are from a single determination and have an accuracy range of ± 0.009 ‰ at the 95% probability level (Strickland, MS, 1958).

The dissolved oxygen analyses were done in the shipboard laboratory by a modified Winkler method (Strickland and Parsons, 1965).

BATHYTHERMOGRAPH OBSERVATIONS

BT observations were made by both ships enroute to and from Station "P" at each 40' interval of longitude, whenever weather and operating schedule permitted. On Station, BT observations were made every 3 hours continuously throughout the patrol, except during intervals of rough weather.

On August 2 a special series of bathythermograph observations was made from "St. Catharines". A cast to 135 m depth was made every 5 minutes for a period of 8 hours on a track that resembled a square spiral centered on a drifting positioning buoy. The observations were approximately one-half mile apart. During the 8 hours the buoy drifted from its initial position at 2015 hours of 50°01'N, 144°59.5'W to a finishing position of 50°05'N, 144°59'W at 0510 hours the next day. The pattern of the survey is shown in the diagram in Fig. 4.

The BT traces have been drawn on pages of standard pre-printed graphs resembling BT calibration grids. The slides were positioned on the appropriate calibration grid in an adjustable holder. The BT traces were aligned on the grid using a temperature value obtained from a thermograph recording of the engine-room intake temperature, which had been checked occasionally with a 3 m reversing thermometer temperature. The top of the trace was always aligned with the zero-depth grid line. The bathythermograms are arranged in a chronological order on the pages. The date-time (year-month-day-hour) and position information are recorded below each bathythermogram. An asterisk indicates the bathythermogram was observed on an oceanographic station.

PERSONNEL

The oceanographer on board CCGS "St. Catharines" during survey P-65-3 was Mr. R. B. Tripp. The officers and men of both weatherships took the BT observations, and the crew of the "St. Catharines" gave excellent assistance during the oceanographic station operations.

SECTION II

Description of the machine-generated data record

INTRODUCTION

This section applies to the machine processing phase of the data reduction and computation.

The oceanographic data previously recorded on CODC data summary forms, a sample of which is shown on the next page, are transferred to punch-cards for subsequent electronic data processing on an IBM 1620 computer, using CODC's OCEANS II program. In addition to computing routine derived quantities, the program carries out unit and format conversions, range checks, plausibility tests, internal editing, and if required, interpolation at standard oceanographic depths. When interpolations are carried out, additional derived values are computed.

After the data have been processed, the data record is prepared using an IBM 1401 computer configuration with the OCEAN REPORT III program, which provides for pre-edited high speed print-out on continuous direct-image masters. These masters subsequently yield the required volume of copies for distribution.

Provision has been made to enter an "estimate of precision" for each observed variable selected for interpolation at standard oceanographic depths. The precision depends on the instrument and/or technique used to determine the variable. A standard precision stated as a **standard deviation** (σ) can be determined for each instrument or technique under routine field conditions by making duplicate determinations of the variables for a homogeneous sample of sea water. These standard deviations are given for each cruise under "GENERAL INFORMATION" in section III of the data record.

The measurement error estimate of a specific observation in this data record, is stated as a multiple of the standard deviation derived as above, and entered in a column immediately to the right of the reported variable. In order to distinguish it from an additional decimal digit, the measurement error estimate is recorded alphabetically, (i.e., $1\sigma = A$, $2\sigma = B$, etc.; in this data record "A" is suppressed).

An option is provided with respect to the measurement of the salinity variable. If observed to three decimal digits, the last digit takes the place of the measurement error estimate.

In the past, a number of methods for both manual and machine interpolation have been developed. Studies and comparisons of the several methods have shown that no single method is universally acceptable. The manual methods are the most elaborate and flexible, but often require subjective decisions. In machine interpolation, all the present methods fail to yield acceptable results under some circumstances. Hence, it is considered necessary to qualify interpolated values by stating an "interpolation error estimate" derived from the particular interpolation formula used. There are two purposes in stating the error estimates; first, to give an indication of the quality of the interpolated data; second, to allow the oceanographer to redesign his observational procedures in order to reduce interpolation errors in future observations.

The interpolation scheme chosen for the OCEANS II program consists of a combination of two 3-point interpolations using the Lagrangian interpolation polynomial, as recommended by Rattray (1962). A parabola is fitted through three values of a given variable (T , S , O_2) considered as a function of depth. The two interpolation parabolas require a total of four points (observed depths). The middle points are common to both parabolas. The average of the two values obtained from the parabolas at standard depth is taken as the interpolated value, and a function of their difference as an estimate of the interpolation error.

This function combined with the "measurement error estimate" comprises the "combined measurement and interpolation error estimate". It is expressed as a multiple of the standard deviation of measurement (σ) under normal routine field conditions by:

CANADIAN OCEANOGRAPHIC DATA CENTRE

1 IDENT. CODE		2 LATITUDE (N=+)		3 LONGITUDE (W=+)		5 DATE		6 TIME		7 DEPTH		9 NO. DEPTHS OBS'D.		VESSEL	
COUNTRY INST.		DEG. MIN. 1/10		DEG. MIN. 1/10		YEAR MONTH DAY		HOURS G.M.T. 1/10		TO BOTTOM				ENTERED BY	
1 8															
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15		19 20 21 22 23 24 25 26 27 28 29 30 31		34 35											
10 WATER		11 WAVES I		12 WAVES II		13 WIND		14 BAROMETER		15 AIR TEMP.		16 WET BULB		17 W.W. CODE	
COLOUR TRANS.		DW DP W HW		DW DP W HW		DIR. FORCE				1/10		1/10		(SEPT. 62)	
20		19		18		17		16		15		14		13	
18		17		16		15		14		13		12		11	
16		15		14		13		12		11		10		9	
14		13		12		11		10		9		8		7	
12		11		10		9		8		7		6		5	
10		9		8		7		6		5		4		3	
8		7		6		5		4		3		2		1	
6		5		4		3		2		1		0		-1	
4		3		2		1		0		-1		-2		-3	
2		1		0		-1		-2		-3		-4		-5	
0		-1		-2		-3		-4		-5		-6		-7	
-2		-3		-4		-5		-6		-7		-8		-9	
-4		-5		-6		-7		-8		-9		-10		-11	
-6		-7		-8		-9		-10		-11		-12		-13	
-8		-9		-10		-11		-12		-13		-14		-15	
-10		-11		-12		-13		-14		-15		-16		-17	
-12		-13		-14		-15		-16		-17		-18		-19	
-14		-15		-16		-17		-18		-19		-20		-21	
-16		-17		-18		-19		-20		-21		-22		-23	
-18		-19		-20		-21		-22		-23		-24		-25	
-20		-21		-22		-23		-24		-25		-26		-27	
-22		-23		-24		-25		-26		-27		-28		-29	
-24		-25		-26		-27		-28		-29		-30		-31	
-26		-27		-28		-29		-30		-31		-32		-33	
-28		-29		-30		-31		-32		-33		-34		-35	
-30		-31		-32		-33		-34		-35		-36		-37	
-32		-33		-34		-35		-36		-37		-38		-39	
-34		-35		-36		-37		-38		-39		-40		-41	
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-38		-39		-40		-41		-42		-43		-44		-45	
-40		-41		-42		-43		-44		-45		-46		-47	
-42		-43		-44		-45		-46		-47		-48		-49	
-44		-45		-46		-47		-48		-49		-50		-51	
-46		-47		-48		-49		-50		-51		-52		-53	
-48															

$$\frac{\sigma_i}{\sigma} = \left\{ \frac{(\Delta V_i)^2}{\sigma^2} + \sum_{n=j-2}^{j+1} (\gamma_n)^2 \left(\frac{\sigma_n}{\sigma} \right)^2 \right\}^{1/2}, \text{ where}$$

σ = Standard deviation of the combined error estimates at standard oceanographic depth,
 ΔV_i = the interpolation error estimate of variable "V" at standard oceanographic depth = $1/3 (\bar{V}_{i_1} - V_{i_2})$
 γ = Interpolation polynomial coefficient.

Z_j = Observed depth.

Z_i = Standard oceanographic depth, such that: $Z_{j-2} < Z_{j-1} < Z_i < Z_j < Z_{j+1}$

The integral part of the fraction $\frac{\sigma_i}{\sigma}$, if ≥ 2 , is reported in this Data Record following the interpolated variable. It represents the combined measurement and interpolation error estimate. In order to distinguish it from an additional decimal digit, it is recorded alphabetically (e.g.: 2 as "B", 3 as "C", etc.).

With respect to the interpolated value of the salinity variable if reported to three decimal digits, the interpolation error estimate is given only when $\frac{\sigma_i}{\sigma} \geq 2$ (the salinity is then recorded to two decimal places). If less than 2, the mean obtained from the two interpolation parabolas is reported to three decimal places.

EXPLANATION OF DATA RECORD HEADINGS

MASTER HEADINGS

(1) C-REF-NO	(6) YR	(11) DEPTH	(16) WAVES 1	(21) AIR T	(26) VIS
(2) CONS. NO	(7) MONTH	(12) MXSAMPD	(17) WAVES 2	(22) WET B	(27) STN
(3) LAT	(8) DAY	(13) NO. DPTH	(18) WND-DIR	(23) WW-CODE	
(4) LON	(9) HR	(14) W-COLOR	(19) WND-FCE	(24) CLD-TPE	
(5) MARSD SQ	(10) C/I	(15) W-TRNSP	(20) BARO	(25) CLD-AMT	(28) HW

(1) CRUISE REFERENCE NUMBER:

Assigned by the Institute. Commences with 001 at the beginning of each year (effective Jan. 1, 1963). Prior to that date the CRN was a number designated by CODC.

(2) CONSECUTIVE NUMBER:

Indicates the chronological order in which the stations were occupied.

(3) LATITUDE:

Indicate the position of the platform at the time of observation.

(4) LONGITUDE:

(5) MARSDEN SQUARE: Designates the geographic area code of the observation (see Marsden square chart).

(6) YEAR:

(7) MONTH:

(8) DAY:

(9) HOUR:

The time (Greenwich Mean Time) at which the surface environmental data were recorded. It is reported to tenths of hours (Table 1).
If an "X" precedes the value for HOUR, (prior to Jan. 1, 1963) it indicates that the reported time is doubtful.

(10) COUNTRY/INSTITUTE:

The International Geophysical Year (IGY) Country Code/Institute Code - see Table 11.

(11) DEPTH:

The sounding reported in metres. If corrected, this is stated in the "GENERAL INFORMATION" chapter of section III. Charted depths are preceded by the letter "C".

(12) MAXIMUM

SAMPLING DEPTH: A code to indicate the deepest sampling depth (used for high speed sorting).

00 m - 50 m = 00

51 m - 150 m = 01

151 m - 250 m = 02

etc.

- (13) NUMBER OF DEPTHS: The number of levels observed (this is entered to initiate a computer safety check, guarding against the loss of punch-cards).
- (14) WATER COLOUR: The Forel-Ule Code (see table 2 and NOTE under FIELD "15" below).
- (15) WATER TRANSPARENCY: The depth in metres at which a Secchi disc (white disc, 30 cm. in diameter) just disappears from view, or the optical density expressed in percentage;

NOTE: The "GENERAL INFORMATION" chapter in section III of the data record will state which method was used.

- (16) WAVES 1
($d_w d_w P_w H_w$ -code): The direction, period and height of the **wind-propagated** wave system. (See Tables 3, 4 and 5). Ref: World Meteorological Organization Codes 0885, 3155, 1555.
- (17) WAVES 2
($d_w d_w P_w H_w$ -code): The direction, period and height of the predominant **non-wind-propagated** wave system. (See Tables 3, 4 and 5). Ref: World Meteorological Organization Codes 0885, 3155, 1555.
- (18) WIND DIRECTION: The true direction to the nearest 10 degrees from which the wind is blowing (wind direction 990 means:—wind variable or direction unknown).
- (19) WIND FORCE
(WND-FCE): Beaufort notation (See Table 6).
- WIND SPEED
(WND-SPD): Anemometer reading reported in metres per second. Instrument height reported in "GENERAL INFORMATION" chapter of section III.
- (20) BAROMETER: The barometric pressure reported in millibars: the "GENERAL INFORMATION" chapter in Section III of the data record will state the type of instrument used.
- (21) AIR TEMPERATURE: In degrees Celsius.
- (22) WET BULB: In degrees Celsius.
- (23) ww CODE: Present Weather Code (See Table 7). Ref: WMO Code 4677
- (24) CLOUD TYPE: The type of predominating clouds (See Table 8). Ref: WMO Code 0500.
- (25) CLOUD AMOUNT: The sky coverage in eighths (See Table 9) Ref: WMO Code 2700
- (26) VISIBILITY: Visibility at the surface (See Table 10). Ref: WMO Code 4300.
- (27) STATION: A station reference number, assigned by the institute prior to, or during the survey.
- (28) HOURS AFTER HIGH WATER: Indicates the state of the tide for nearshore observations.

OBSERVED DATA HEADINGS

(1) GMT	(2) DEPTH	(3) TEMP	(4) SAL	(5) OXYGEN	(6) SGMT
(7) SOUND	(8) PO_4	(9) -P-	(10) NO_2	(11) NO_3	(12) SiO_2
				(13) pH.	

NOTE: Headings (1) to (7) will always be present. Headings (8) to (13) appear only when one or more additional chemical entries were made.

(1) G.M.T.: The Greenwich Mean Time of (in-situ) thermometer inversion and sea water sample collection.

When a multiple cast was initiated prior to and continued after midnight, the times indicated are uninterrupted by the change of day and appear beyond 24.0 hours. This will be accompanied by a statement: "MULTIPLE CAST CONTINUED NEXT DAY", which is printed following the last level of observed values.

(2) DEPTH: The depth in metres at the reversal time of deepest cast.

(3) TEMPERATURE: Temperatures from deepsea reversing thermometers, read to 0.01° C. Surface temperature measurement procedures are described in the chapter "OBSERVATION PROCEDURES" of section I, and/or the "GENERAL INFORMATION" chapter of section III. An alphabetical character following the temperature value represents the measurement error estimate referred to in the INTRODUCTION to this section.

(4) SALINITY: Salinity as defined by: $S = 0.03 + 1.805 C1\%$, reported in:
 a. 1/100 parts per 1000, or
 b. 1/1000 parts per 1000.

In case a: an alphabetical character following the value is the measurement error estimate as referred to under (3).

In case b: no error estimate indication is provided for, but an additional decimal digit takes its place.

(5) OXYGEN: The concentration of dissolved oxygen expressed in millilitres per litre to 2 decimal places. An alphabetical character following the value is the measurement error estimate as referred to under (3).

(6) SIGMA-T: The specific gravity anomaly as defined by: $(\text{Specific gravity} - 1) \times 10^3$ (e.g., σ_t reported as 2456, reads 24.56, and corresponds to a specific gravity of 1.02456).

(7) SOUND: The sound velocity is reported in m/sec. to 1 decimal place (e.g., 1437.9 m/sec.). The computation is carried out using Wilson's formula (1960), expressed in terms of temperature, salinity and total pressure.

- (8) PO_4 Phosphate-Phosphorus reported to hundredths of microgram-atoms per litre.
- (9) -P- Total Phosphorus reported to hundredths of microgram-atoms per litre.
- (10) NO_2 Nitrite-Nitrogen reported to hundredths of microgram-atoms per litre — No dissolved nitrogen included —
- (11) NO_3 Nitrate-Nitrogen reported to tenths of microgram-atoms per litre.
- (12) SiO_2 Silicate-Silicon reported in whole microgram-atoms per litre.
- (13) pH The pH value.

NOTE: "TRC" (trace) is reported when a chemical entry has a value less than the standard deviation of measurement for that particular variable.

INTERPOLATED DATA HEADINGS

- | | | | | | |
|-------------|------------|----------|------------|----------|-----------|
| (1) DEPTH | (2) TEMP | (3) SAL | (4) OXYGEN | (5) SGMT | (6) SOUND |
| (7) DELTA-D | (8) POT-EN | (9) SVA. | | | |

- (1) DEPTH: Standard Oceanographic Depth in whole metres, as well as additional depths: 125, 175, 225, 3500, 4500, 5500, 6500, 7500, 8500, 9500.
- (2) TEMPERATURE: Interpolated value at standard depth, followed by the combined measurement and interpolation error estimate (see "INTRODUCTION" to section II of the data record).
- (3) SALINITY:
- A. The reported salinity values are measured to three decimal places.
 - (i) the interpolation error estimate is less than twice the standard deviation of measurement
 - the interpolated value is reported to three decimal places (e.g., 30.139).
 - (ii) the interpolation error estimate is equal to or greater than twice the standard deviation of measurement.
 - the interpolated value is reported to two decimal places, and followed by the interpolation error estimate (e.g., 29.23 C).
 - B. The reported salinity values are measured to two decimal places and followed by the measurement error estimate.
 - the interpolated value is reported to two decimal places, and followed by the combined measurement and interpolation error estimate (e.g., 30.59 B).
- (4) OXYGEN: Interpolated value at standard depth, followed by the combined measurement and interpolation error estimate (see "Introduction" to section II of the data record).

(5) SIGMA-T: Computed from temperature and salinity values at standard oceanographic depth.

(6) SOUND
VELOCITY: Computed from temperature, salinity and total pressure values at standard oceanographic depth, using Wilson's formula (1960).

(7) DELTA-D: The geo-potential anomaly as defined by:

$$\Delta D = \int_0^P \delta \rho dp$$

ΔD is expressed in dynamic metres (10^5 ergs/gram) and recorded to three decimal places (e.g., 2.345 dyn. metres).

(8) POTENTIAL
ENERGY
ANOMALY:

The Potential energy anomaly χ as defined by:

$$\chi = 1/g \int_0^P \rho \delta dp = \int_0^Z \rho \delta dz$$

χ is expressed in units of 10^8 ergs/cm² and recorded to two decimal places (e.g., 116.44).

(9) SPECIFIC
VOLUME
ANOMALY:

The specific volume anomaly as defined by:

$$\delta = \alpha - \alpha_{35.0.P}$$

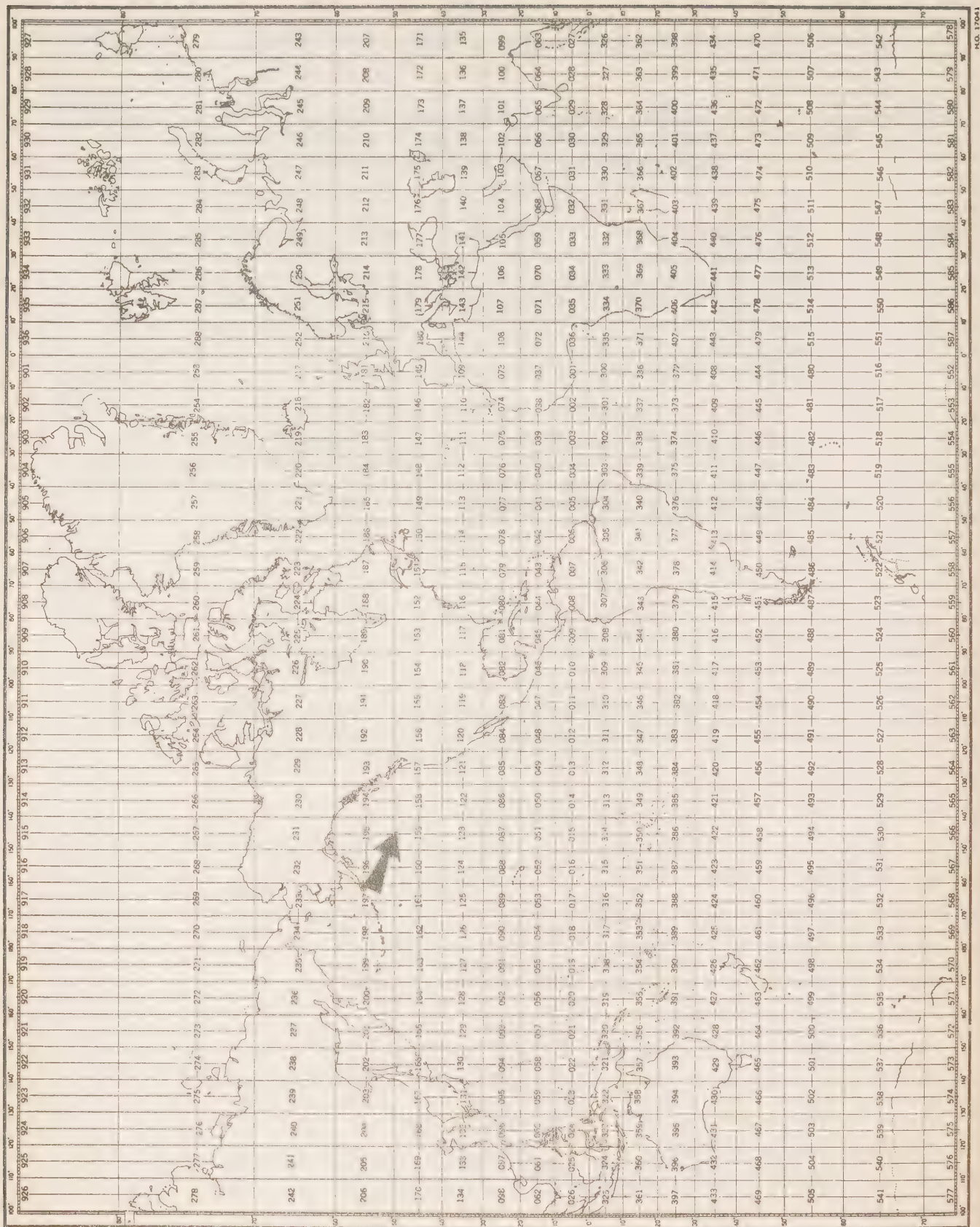
δ is expressed in ml/gr, and conventionally reported as $10^5 \delta$, to one decimal place (i.e., δ reported as 1234, reads 123.4, and corresponds to a specific volume anomaly of 0.001234 ml/gr.).

SPECIAL CHARACTERS

‡ (Record mark): is used to indicate inconsistencies which are printed in an area below the "Observed Data". A corresponding record mark at the extreme left hand side indicates the level at which the inconsistency occurs

* (Asterisk): this character may occur in the **interpolated** portion of the data record. It is printed at the extreme left hand side of the page, when three or more standard depth levels fall within any one **observed depth interval**. The **third**, and all consequent levels are preceded by the asterisk to indicate that more than **two** machine interpolations were carried out, utilizing the same set of interpolation parabolas. The asterisk will also appear when the last standard depth is an extrapolation and there are at least two **interpolations** between the last two observed depths.

Q: appears occasionally in this data record, preceding an observed oxygen value. This "questionable" indicator infers that the value does not fit the usual pattern of oxygen distribution. "The questionable" value could be due to a sampling error and, generally, is not a result of an error in determination.



MARS DEN SQUARE CHART

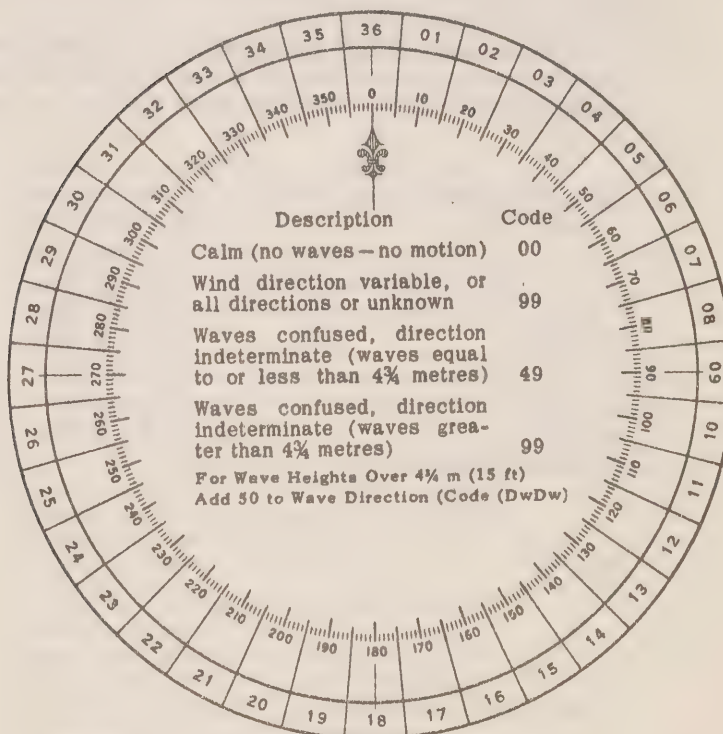
Table 1
CONVERSION
MINUTES TO $\frac{1}{10}$ HRS.

Minutes	Tenths Hrs.
00-03	0
04-08	1
09-15	2
16-20	3
21-27	4
28-32	5
33-39	6
40-44	7
45-51	8
52-56	9
57-59	0 (next HR.)

Table 2
WATER COLOR CODE
Based on Percentage Yellow

Code:	Description
00	Deep Blue
10	Blue
20	Greenish Blue
30	Bluish Green
40	Green
50	Light Green
60	Yellowish Green
70	Yellow Green
80	Green Yellow
90	Greenish Yellow
99	Yellow

Table 3. DIRECTION CODE (dd)



NOTE:

Always use the true direction from which the wind is blowing, or the direction from which Waves I (sea), or Waves II (swell) come.

Table 4. PERIOD OF THE WAVES (Pw)

(Measure to the Nearest Second)

Code:	Period in Seconds:	Code:	Period in Seconds:
2	5 sec. or less	8	16 or 17 sec.
3	6 or 7 sec.	9	18 or 19 sec.
4	8 or 9 sec.	0	20 or 21 sec.
5	10 or 11 sec.	1	Over 21 sec.
6	12 or 13 sec.	X	Calm, or period not determined
7	14 or 15 sec.		

Table 5. HEIGHT OF THE WAVES (Hw)

- The average value of the wave height (vertical distance between trough and crest) is reported, as obtained from the larger well formed waves of the wave system being observed.
- Each code figure provides for reporting a range of heights. For example: 1 = $\frac{1}{4}$ m (1 ft) to $\frac{3}{4}$ m ($2\frac{1}{2}$ ft); 5 = $2\frac{1}{4}$ m (7 ft) to $2\frac{3}{4}$ m (9 ft); 9 = $4\frac{1}{4}$ m ($13\frac{1}{2}$ ft) to $4\frac{3}{4}$ m (15 ft), etc.
- If a wave height comes exactly midway between the heights corresponding to two code figures, the lower code figure is reported; e.g. a height of $2\frac{3}{4}$ m is reported by code figure 5.

Code		Code
0	Less than $\frac{1}{4}$ m (1 ft)	0 5 m (16 ft)
1	$\frac{1}{2}$ m (1½ ft)	1 5½ m (17½ ft)
2	1 m (3 ft)	2 6 m (19 ft)
3	1½ m (5 ft)	3 6½ m (21 ft)
4	2 m (6½ ft)	4 7 m (22½ ft)
5	2½ m (8 ft)	5 7½ m (24 ft)
6	3 m (9½ ft)	6 8 m (25½ ft)
7	3½ m (11 ft)	7 8½ m (27 ft)
8	4 m (13 ft)	8 9 m (29 ft)
9	4½ m (14 ft)	9 9½ m (30½ ft) or more
x	Height not determined	

Table 6. WIND FORCE CODE

The Beaufort force of the wind is estimated from the appearance of the sea surface, according to the table below. This table is only intended as a guide to show roughly what may be expected on the open sea, remote from land. Factors which must be taken into account are the "lag" effect between the wind increasing and the sea getting up; and the influence of "fetch", depth, swell, heavy rain and tide effect on the appearance of the sea. Estimation of the wind force by this method becomes unreliable in shallow water or when close inshore, owing to the tidal effect and the shelter provided by the land.

Code	Appearance of sea if fetch and duration of the blow have been sufficient to develop the sea fully	Description
00	Sea like a mirror	Calm
01	Ripples with the appearance of scales are formed, but without foam crests.	Light Air
02	Small wavelets; crests have a glassy appearance and do not break.	Light Breeze
03	Large wavelets; crests begin to break; foam of glassy appearance; perhaps scattered white horses.	Gentle Breeze
04	Small waves, becoming longer; fairly frequent white horses.	Moderate breeze
05	Moderate waves; many white horses are formed (chance of some spray)	Fresh Breeze
06	Large waves; white foam crests everywhere (probably some spray)	Strong Breeze
07	Sea heaps up and white foam from breaking waves begins to be blown in streaks along the direction of the wind.	Near Gale
08	Moderately high waves; edges of crests begin to break into the spindrift; foam is blown in well-marked streaks along the direction of the wind.	Gale
09	High waves; dense streaks of foam along wind; crests begin to topple, tumble and roll over; spray may affect visibility.	Strong Gale
10	Very high waves with long overhanging crests; foam in great patches blown in dense white streaks along wind; sea surface takes a white appearance; tumbling becomes heavy and shock-like; visibility affected.	Storm
11	Exceptionally high waves (medium sized ships may be lost to view behind waves); sea covered with long white patches of foam lying along the wind; everywhere edges of crests are blown into froth; visibility affected.	Violent Storm
12	Air is filled with foam and spray; sea completely white with driving spray; visibility seriously affected.	Hurricane

Table 7. PRESENT WEATHER

W.W. CODE

NO PRECIPITATION ON STATION AT TIME OF OBSERVATION

Code figure ww			
No meteors except photometeors	00	Cloud development not observed or not observable	characteristic change of the state of sky during the past hour
	01	Clouds generally dissolving or becoming less developed	
	02	State of sky on the whole unchanged	
Haze, dust, sand or smoke	03	Clouds generally forming or developing	
	04	Visibility reduced by smoke, e.g. veldt or forest fires, industrial smoke or volcanic ashes	
	05	Haze	
	06	Widespread dust in suspension in the air, not raised by wind at or near the station at the time of observation	
	07	Dust or sand raised by wind at or near the station at the time of observation, but no well developed dust whirl(s) or sand whirl(s), and no duststorm or sandstorm seen	
	08	Well developed dust whirl(s) or sand whirl(s) seen at or near the station during the preceding hour or at the time of observation, but no dustorm or sandstorm	
	09	Duststorm or sandstorm within sight at the time of observation, or at the station during the preceding hour	
	10	Mist	
	11	Patches of	shallow fog or ice fog at the station, whether on land or sea, not deeper than about 2 metres on land or 10 metres at sea
	12	More of less continuous	
	13	Lightning visible, no thunder heard	
	14	Precipitation within sight, not reaching the ground or the surface of the sea	
	15	Precipitation within sight, reaching the ground or the surface of the sea, but distant (i.e. estimated to be more than 5 km) from the station	
	16	Precipitation within sight, reaching the ground or the surface of the sea, near to, but not at the station	
	17	Thunderstorm, but no precepitation at the time of observation	
	18	Squalls	at or within sight of the station during the preceding hour or at the time of observation
	19	Funnel clouds	
ww = 20 - 29			
	20	Precipitation, fog, ice fog or thunderstorm at the station during the preceding hour but not at the time of observation	not falling as shower(s)
	21	Drizzle (not freezing) or snow grains	
	22	Rain (not freezing)	
	23	Snow	
	24	Rain and snow or ice pellets, type (a)	
	25	Freezing drizzle or freezing rain	
	26	Shower(s) of rain	
	27	Shower(s) of snow, or of rain and snow	
	28	Shower(s) of hail, or of rain and hail	
	29	Fog or ice fog	
	29	Thunderstorm (with or without precipitation)	
ww = 30 - 39			
	30	Duststorm, sandstorm, drifting or blowing snow	
	31	Slight or moderate dust-storm or sand-storm	-has decreased during the preceding hour -no appreciable change during the preceding hour -has begun or has increased during the preceding hour
	32		
	33	Severe dust-storm or sand-storm	-has decreased during the preceding hour -no appreciable change during the preceding hour -has begun or has increased during the preceding hour
	34		
	35		
	36	Slight or moderate blowing snow	generally low (below eye level)
	37	Heavy drifting snow	
	38	Slight or moderate blowing snow	generally high (above eye level)
	39	Heavy blowing snow	
ww = 40 - 49			
	40	Fog or ice fog at the time of observation	
	41	Fog or ice fog at a distance at the time of observation, but not at the station during the preceding hour, the fog or ice fog extending to a level above that of the observer	
	42	Fog or ice fog in patches	
	43	Fog or ice fog, sky visible	has become thinner during the preceding hour
	44	Fog or ice fog, sky invisible	
	45	Fog or ice fog, sky visible	no appreciable change during the preceding hour
	46	Fog or ice fog, sky invisible	
	47	Fog or ice fog, sky visible	has begun or has become thicker during the preceding hour
	48	Fog or ice fog, sky invisible	
	49	Fog, depositing rime, sky visible	
	49	Fog, depositing rime, sky invisible	

NO PRECIPITATION ON STATION AT TIME OF OBSERVATION

PRECIPITATION ON STATION AT TIME OF OBSERVATION

ww = 50 - 59 Drizzle

- | | | | |
|----|--|---|--------------------------------------|
| 50 | Drizzle, not freezing, intermittent | { | slight at time of observation |
| 51 | Drizzle, not freezing, continuous | | |
| 52 | Drizzle, not freezing, intermittent | { | moderate at time of observation |
| 53 | Drizzle, not freezing, continuous | | |
| 54 | Drizzle, not freezing, intermittent | { | heavy (dense) at time of observation |
| 55 | Drizzle, not freezing, continuous | | |
| 56 | Drizzle, freezing, slight | | |
| 57 | Drizzle, freezing, moderate or heavy (dense) | | |
| 58 | Drizzle and rain, slight | | |
| 59 | Drizzle and rain, moderate or heavy | | |

ww = 60 - 69 Rain

- | | | | |
|----|---|---|---------------------------------|
| 60 | Rain, not freezing, intermittent | { | slight at time of observation |
| 61 | Rain, not freezing, continuous | | |
| 62 | Rain, not freezing, intermittent | { | moderate at time of observation |
| 63 | Rain, not freezing, continuous | | |
| 64 | Rain, not freezing, intermittent | { | heavy at time of observation |
| 65 | Rain, not freezing, continuous | | |
| 66 | Rain, freezing, slight | | |
| 67 | Rain, freezing, moderate or heavy | | |
| 68 | Rain or drizzle and snow, slight | | |
| 69 | Rain or drizzle and snow, moderate or heavy | | |

70 - 79 Solid precipitation not in showers

- | | | | |
|----|---|---|---------------------------------|
| ww | | | |
| 70 | Intermittent fall of snow flakes | { | slight at time of observation |
| 71 | Continuous fall of snow flakes | | |
| 72 | Intermittent fall of snow flakes | { | moderate at time of observation |
| 73 | Continuous fall of snow flakes | | |
| 74 | Intermittent fall of snow flakes | { | heavy at time of observation |
| 75 | Continuous fall of snow flakes | | |
| 76 | Ice prisms (with or without fog) | | |
| 77 | Snow grains (with or without fog) | | |
| 78 | Isolated starlike snow crystals (with or without fog) | | |
| 79 | Ice pellets, type (a) | | |

ww = 80 - 99 Showery precipitation, or precipitation with current or recent thunderstorm

- | | | | |
|----|--|---|---|
| 80 | Rain shower(s), slight | | |
| 81 | Rain shower(s), moderate or heavy | | |
| 82 | Rain shower(s), violent | | |
| 83 | Shower(s) of rain and snow mixed, slight | | |
| 84 | Shower(s) of rain and snow mixed, moderate or heavy | | |
| 85 | Snow shower(s), slight | | |
| 86 | Snow shower(s), moderate or heavy | | |
| 87 | Shower(s) of snow pellets or ice pellets, type (b), with or without rain or rain and snow mixed | { | - slight |
| 88 | | | |
| 89 | Shower(s) of hail, with or without rain or rain and snow mixed, not associated with thunder | { | - moderate or heavy |
| 90 | | | |
| 91 | Slight rain at time of observation | | |
| 92 | Moderate or heavy rain at time of observation | | |
| 93 | Slight snow, or rain and snow mixed or hail at time of observation | { | thunderstorm during the preceding hour but not at time of observation |
| 94 | Moderate or heavy snow, or rain and snow mixed or hail at time of observation | | |
| 95 | Thunderstorm, slight or moderate, without hail, but with rain and/or snow at time of observation | { | thunderstorm at time of observation |
| 96 | Thunderstorm, slight or moderate, with hail at time of observation | | |
| 97 | Thunderstorm, heavy, without hail, but with rain and/or snow at time of observation | { | |
| 98 | Thunderstorm, combined with duststorm or sandstorm at time of observation | | |
| 99 | Thunderstorm, heavy, with hail at time of observation | | |

PRECIPITATION ON STATION AT TIME OF OBSERVATION

Table 8. CLOUD TYPE CODE

Code	Cloud Type	Code	Cloud Type
0	Cirrus Ci	5	Nimbostratus Ns
1	Cirrocumulus Cc	6	Stratocumulus Sc
2	Cirrostratus Cs	7	Stratus St
3	Alto cumulus Ac	8	Cumulus Cu
4	Altostratus As	9	Cumulonimbus Cb
X	Cloud not visible owing to darkness, fog, duststorm, sandstorm, or other analogous phenomena		

Table 9. CLOUD AMOUNT CODE

Code	Cloud Cover	Code	Cloud Cover
0	0	6	6 oktas
1	1 okta or less, but not zero	7	7 oktas or more, but not 8 oktas
2	2 oktas	8	8 oktas
3	3 oktas	9	Sky obscured, or cloud amount cannot be estimated
4	4 oktas		
5	5 oktas		

Note: 1 okta = $\frac{1}{8}$ of the sky covered

Table 10. VISIBILITY

Code	Estimate of hor. Visibility
0	Less than 50 metres (less than 55 yards)
1	50-200 metres (approx. 55-220 yards)
2	200-500 metres (approx. 220-550 yards)
3	500-1,000 metres (approx. 550 yards- $\frac{1}{2}$ n.m.)
4	1-2 km (approx. $\frac{3}{4}$ -1 n.m.)
5	2-4 km (approx. 1-2 n.m.)
6	4-10 km (approx. 2-6 n.m.)
7	10-20 km (approx. 6-12 n.m.)
8	20-50 km (approx. 12-30 n.m.)
9	50 km or more (30 n.m. or more)

Note: n.m. = nautical mile

Table 11

CCO Institute Code

01. Atlantic Oceanographic Group.
02. Pacific Oceanographic Group.
03. Biological Station, St. Andrews, N. B.
04. Arctic Biological Station, St. Anne de Bellevue, P. Q.
05. Biological Station, St. John's, Nfld.
06. Station de Biologie Marine, Grande Riviere, P. Q.
07. Canadian Hydrographic Service.
08. Naval Research Establishment, Dartmouth, N. S.
09. Pacific Naval Laboratory, Esquimalt, B. C.
10. Bedford Institute of Oceanography.
11. Polar Continental Shelf Project.
12. Great Lakes Institute.
13. Inland Region, Oceanographic Research, Ottawa.
14. Institute of Oceanography, Dalhousie University.

SECTION III

Serial oceanographic data

GENERAL INFORMATION

<u>Institute:</u>	Pacific Oceanographic Group Nanaimo, B. C.
<u>Observation Platform:</u>	CCGS "St. Catharines"
<u>Vessel's Cruising Speed:</u>	13 knots
<u>Total Number of Stations Occupied:</u>	33
<u>Anemometer Height Above Sea Level:</u>	19 metres
<u>Water transparency:</u>	Secchi Disc
<u>Barometer readings:</u>	Aneroid Barometer (corrected)
<u>Air temperature:</u>	Sling Psychrometer
<u>Wet bulb temperature:</u>	Sling Psychrometer
<u>Surface sea water temperature:</u>	Bucket sample (deck thermometer)
<u>Depth to bottom:</u>	U. S. Coast and Geodetic Survey Chart 8500

The following Standard Deviations were used to express both measurement and interpolation error estimates:

Temperature	0.02
Salinity	0.003
Oxygen	0.03

C-REF-NO 006 YR 1965 DEPTH 129 WAVES 1 3421 AIR T 11.6 VIS 4
 CONS. NO 001 MONTH 7 MXSAMPD 01 WAVES 2 3521 WET B 11.1 STN 001
 LAT 48-330N DAY 02 NO.DPTH 8 WND-DIR 270 WW-CODE 45
 LON 125-330W HR 23.1 W-COLGR 40 WND-SPD 02 CLD-TPE X
 MARSD SQ 157 C/I 1802 W-TRNSP 07 BARO 1020.0 CLD-AMT 9 HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
231	0000	110 B	32000		2446	14902
231	0010	0971	32128		2478	14858
231	0020	0923 B	32511		2516	14847
231	0030	0847	32928		2560	14825
231	0050	0727	33508		2623	14790
231	0075	0678	33798		2652	14778
231	0100	0668	33844		2657	14779
231	0125	0669	33857		2658	14784

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1100 B	32000		2446	14902	0000	00000	3477
0010	0971	32128		2478	14858	0033	00002	3176
0020	0923 B	32511		2516	14847	0064	00006	2821
0030	0847	32928		2560	14825	0090	00013	2401
0050	0727	33508		2623	14790	0132	00030	1806
0075	0678	33798		2652	14778	0174	00056	1529
0100	0668	33844		2657	14779	0212	00090	1486
0125	0669	33857		2658	14784	0250	00133	1481

C-REF-NO 006	YR 1965	DEPTH 109	WAVES 1 3422	AIR T 11.6	VIS 4
CONS. NO 002	MONTH 7	MXSAMPD 01	WAVES 2 3522	WET B 11.1	STN 002
LAT 48-380N	DAY 03	NO.DPTH 7	WND-DIR 340	WW-CODE 45	
LON 126-000W	HR 00.9	W-COLOR	WND-SPD 05	CLD-TPE X	
MARSD SQ 157	C/I 1802	W-TRNSP	BARO 1018.0	CLD-AMT 9	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
009	0000	123 B	31799		2407	14945
009	0010	1216	31768		2407	14941
009	0020	1064	32377		2482	14897
009	0030	0928	32756		2534	14853
009	0050	0789	33124		2584	14809
009	0075	0707	33546		2629	14786
009	0100	0663	33915		2664	14778

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1230 B	31799		2407	14945	0000	00000	3850
0010	1216	31768		2407	14941	0039	00002	3850
0020	1064	32377		2482	14897	0074	00007	3142
0030	0928	32756		2534	14853	0103	00015	2648
0050	0789	33124		2584	14809	0151	00034	2176
0075	0707	33546		2629	14786	0201	00065	1755
0100	0663	33915		2664	14778	0241	00100	1426

C-REF-NO 006	YR 1965	DEPTH C 1300	WAVES 1 3422	AIR T 11.1	VIS 4
CONS. NO 003	MONTH 7	MXSAMPD 11	WAVES 2 3421	WET B 10.5	STN 003
LAT 48-420N	DAY 03	NO.DPTH 19	WND-DIR 340	WW-CODE 45	
LON 126-400W	HR 03.5	W-COLOR	WND-SPD 06	CLD-TPE X	
MARSD SQ 157	C/I 1802	W-TRNSP	BARO 1018.0	CLD-AMT 9	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
035	0000	115 B	32178		2451	14922
035	0010	1129	32150		2453	14916
035	0020	1125	32152		2454	14916
035	0030	0991	32255		2485	14870
035	0050	0782	32572		2542	14799
035	0075	0699	32990		2586	14776
035	0099	0721	33296		2607	14793
035	0124	0708	33696		2640	14797
035	0149	0704	33853		2653	14801
035	0174	0676	33898		2661	14795
035	0199	0667	33913		2663	14796
035	0249	0619	33938		2671	14785
035	0298	0577	33982		2680	14777
035	0398	0520	34038		2691	14771
039	0470	0491 B	34093		2699	14772
039	0564	0451	34146		2708	14771
039	0755	0402	34281		2723	14784
039	0950	0358	34377		2736	14800
039	1146	0325 B	34426		2743	14819

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1150 B	32178		2451	14922	0000	00000	3430
0010	1129	32150		2453	14916	0034	00002	3417
0020	1125	32152		2454	14916	0069	00007	3411
0030	0991	32255		2485	14870	0102	00015	3117
0050	0782	32572		2542	14799	0159	00038	2577
0075	0699	32990		2586	14776	0218	00076	2159
0100	0721	33314		2608	14793	0270	00122	1950
0125	0708	33706		2641	14797	0315	00174	1645
0150	0703	33856		2654	14801	0355	00230	1530
0175	0676	33899		2661	14795	0393	00293	1465
0200	0666	33913		2663	14796	0430	00363	1446
0225	0644	33925		2667	14791	0466	00442	1412
0250	0618	33939		2671	14785	0501	00527	1372
0300	0576	33983		2680	14777	0568	00716	1292
0400	0519	34040		2691	14771	0693	01164	1193
0500	0478 B	34111		2702	14771	0809	01698	1102
0600	0440	34172		2711	14773	0917	02302	1023

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0700	0414	34242		2719	14780	1016	02966	0949
0800	0391	34307		2727	14788	1109	03679	0884
1000	0349	34393		2738	14804	1278	05236	0788

C-REF-NO 006	YR 1965	DEPTH C 2929	WAVES 1 00X0	AIR T 13.8	VIS 7
CONS. NO 004	MONTH 7	MXSAMPD 15	WAVES 2 00X0	WET B 13.3	STN 006
LAT 49-020N	DAY 03	NO.DPTH 14	WND-DIR CALM	WW-CODE 01	
LON 130-400W	HR 17.4	W-COLOR 10	WND-SPD 00	CLD-TPE 5	
MARSD SQ 158	C/I 1802	W-TRNSP 10	BARO 1022.0	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
174	0000	132 B	32414		2437	14983
174	0010	1202	32369		2457	14944
174	0020	1108	32376		2474	14913
174	0030	1082	32416		2482	14905
174	0050	1031	32487		2496	14891
174	0075	0752	32580		2547	14791
174	0100	0644	32682		2569	14754
180	0398	0467 B	33993		2694	14749
180	0498	0425	34066		2704	14749
180	0597	0402	34140		2712	14756
180	0796	0369	34283		2727	14777
180	0996	0338	34385		2738	14799
180	1195	0291	34453		2748	14813
180	1493	0237	34516		2758	14841

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1320 B	32414		2437	14983	0000	00000	3563
0010	1202	32369		2457	14944	0035	00002	3382
0020	1108	32376		2474	14913	0068	00007	3216
0030	1082	32416		2482	14905	0100	00015	3145
0050	1031	32487		2496	14891	0162	00040	3013
0075	0752	32580		2547	14791	0232	00084	2534
0100	0644	32682		2569	14754	0293	00139	2322
0125	0397 I	3278 B		2605	14658	0347	00201	1980
0150	0248 I	3288 C		2626	14599	0394	00267	1774
*0175	0131 I	3298 C		2643	14553	0437	00338	1611
*0200	0044 I	3309 C		2656	14520	0476	00412	1478
*0225	-0011 I	3319 C		2668	14500	0512	00490	1367
*0250	-0034 I	3330 C		2678	14495	0545	00571	1271
*0300	0012 I	3353 C		2693	14528	0605	00741	1123
0400	0466 B	33995		2694	14748	0721	01157	1164
0500	0424	34067		2704	14749	0834	01676	1073
0600	0401	34142		2712	14757	0938	02267	1001
0700	0384	34217		2720	14767	1036	02918	0934
0800	0368	34285		2727	14778	1128	03622	0874
1000	0337	34387		2738	14799	1295	05160	0779
1200	0295 B	34457		2748	14816	1444	06839	0692
1500	0236	34517		2758	14841	1640	09545	0597

C-REF-NO 006	YR 1965	DEPTH C 3275	WAVES 1 2411	AIR T 13.8	VIS 7
CONS. NO 005	MONTH 7	MXSAMPD 04	WAVES 2 2612	WET B 12.7	STN 007
LAT 49-100N	DAY 04	NO.DPTH 14	WND-DIR 240	WW-CODE 02	
LON 132-400W	HR 00.8	W-COLOR 10	WND-SPD 02	CLD-TPE 6	
MARSD SQ 158	C/I 1802	W-TRNSP 12	BARO 1022.0	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
008	0000	135 B	32549		2442	14995
008	0010	1132	32557		2484	14922
008	0020	1054	32575		2499	14896
008	0030	1035	32575		2502	14891
008	0050	0909	32562		2522	14847
008	0075	0714	32573		2551	14776
008	0100	0623	32689		2572	14746
008	0125	0609 B	33036		2601	14749
008	0150	0599	33422		2633	14754
008	0175	0582	33730		2659	14755
008	0199	0557	33812		2669	14750
008	0249	0513	33876		2679	14741
008	0299	0459	33919		2689	14728
008	0399	0429	34025		2700	14733

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1350 B	32549		2442	14995	0000	00000	3521
0010	1132	32557		2484	14922	0033	00002	3121
0020	1054	32575		2499	14896	0064	00006	2979
0030	1035	32575		2502	14890	0094	00014	2950
0050	0909	32562		2522	14847	0151	00037	2767
0075	0714	32573		2551	14776	0217	00079	2489
0100	0623	32689		2572	14746	0278	00133	2291
0125	0609 B	33036		2601	14749	0332	00195	2018
0150	0599	33422		2633	14754	0379	00261	1721
0175	0582	33730		2659	14755	0419	00328	1473
0200	0556	33814		2669	14750	0455	00397	1383
0225	0534	3386 B		2675	14746	0489	00471	1328
0250	0512	33877		2679	14741	0522	00551	1290
0300	0467 C	3393 B		2688	14732	0585	00729	1207
0400	0429	34026		2700	14733	0702	01144	1100

C-REF-NO 006	YR 1965	DEPTH C 3549	WAVES 1 2822	AIR T 12.2	VIS 7
CONS. NO 006	MONTH 7	MXSAMPD 04	WAVES 2 2823	WET B 09.4	STN 008
LAT 49-190N	DAY 04	NO.DPTH 14	WND-DIR 300	WW-CODE 02	
LON 134-400W	HR 07.4	W-COLOR	WND-SPD 02	CLD-TPE 9	
MARSD SQ 158	C/I 1802	W-TRNSP	BARO 1023.0	CLD-AMT 7	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
074	0000	122 B	32605		2471	14951
074	0010	1272	32544		2457	14970
074	0019	1075	32596		2497	14903
074	0029	0983	32610		2514	14872
074	0048	0738	32642		2553	14782
074	0072	0676	32647		2562	14762
074	0096	0579	32728		2581	14728
074	0121	0585	33148		2613	14740
074	0145	0575	33526		2644	14745
074	0170	0562	33719		2661	14746
074	0194	0516	33736		2668	14732
074	0244	0507	33845		2677	14738
074	0294	0469 B	33892		2685	14731
074	0394	0424	33972		2697	14730

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1220 B	32605		2471	14951	0000	00000	3238
0010	1272	32544		2457	14970	0033	00002	3380
0020	1063 B	32598		2499	14899	0065	00007	2977
0030	0969	32612		2516	14867	0094	00014	2818
0050	0728 B	32642		2555	14779	0147	00035	2453
0075	0662 B	3265 B		2564	14757	0208	00074	2368
0100	0577 B	3279 C		2585	14728	0265	00125	2165
0125	0584	3322 B		2619	14741	0316	00183	1852
0150	0574	33580		2649	14746	0359	00243	1573
0175	0553	3373 B		2663	14743	0397	00306	1439
0200	0513 B	33748		2669	14731	0432	00375	1381
0225	0505 C	3380 B		2674	14733	0467	00449	1336
0250	0503	33852		2678	14737	0500	00530	1298
0300	0476 C	3391 C		2686	14735	0563	00709	1227
0400	0420	33973		2697	14729	0682	01134	1130

C-REF-NO 006	YR 1965	DEPTH C 3774	WAVES 1 00X0	AIR T 11.6	VIS 7
CONS. NO 007	MONTH 7	MXSAMPD 35	WAVES 2 2724	WET B 08.8	STN 009
LAT 49-260N	DAY 04	NO.DPTH 24	WND-DIR CALM	WW-CODE 02	
LON 136-400W	HR 14.4	W-COLOR 10	WND-SPD 00	CLD-TPE 6	
MARSD SQ 158	C/I 1802	W-TRNSP 13	BARO 1023.0	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
144	0000	117 B	32523		2474	14933
144	0010	1184	32515		2471	14940
144	0020	1007	32546		2505	14878
144	0030	0970 B	32559		2512	14867
144	0050	0672	32656		2563	14757
144	0075	0626	32682		2571	14743
144	0100	0534	32753		2588	14711
144	0125	0515 B	33083		2616	14711
144	0150	0503	33471		2648	14716
144	0175	0492	33677		2666	14718
144	0200	0471	33739		2673	14714
144	0250	0439	33823		2683	14710
144	0300	0469 B	33936		2689	14732
144	0400	0414	34016		2701	14727
144	0500	0396	34096		2709	14737
152	0595	0385	34181		2717	14749
152	0792	0346	34299		2730	14767
152	0989	0307	34382		2741	14784
152	1187	0270 B	34448		2749	14803
152	1485	0232	34517		2758	14837
152	1982	0189	34602		2768	14904
152	2480	0168	34641		2773	14980
152	2975	0158	34668		2776	15062
152	3468	0155 B	34678		2777	15147

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D.	POT.EN	SVA
0000	1170 B	32523		2474	14933	0000	00000	3210
0010	1184	32515		2471	14939	0032	00002	3243
0020	1007	32546		2505	14878	0063	00006	2925
0030	0970 B	32559		2512	14866	0093	00014	2859
0050	0672	32656		2563	14757	0145	00035	2370
0075	0626	32682		2571	14743	0204	00072	2297
0100	0534	32753		2588	14711	0260	00122	2140
0125	0515 B	33083		2616	14711	0310	00180	1874
0150	0503	33471		2648	14716	0354	00241	1572
0175	0492	33677		2666	14718	0391	00303	1409
0200	0471	33739		2673	14714	0426	00370	1342
0225	0450	33783		2679	14710	0459	00442	1289

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0250	0439	33823		2683	14710	0491	00520	1249
0300	0469 B	33936		2689	14732	0553	00694	1202
0400	0414	34016		2701	14727	0668	01107	1091
0500	0396	34096		2709	14737	0775	01598	1021
0600	0384	34185		2718	14750	0875	02159	0950
0700	0366	34251		2725	14759	0968	02779	0888
0800	0344	34303		2731	14768	1055	03449	0834
1000	0305	34386		2741	14785	1214	04918	0743
1200	0268 B	34452		2750	14804	1357	06526	0666
1500	0230	34520		2758	14839	1548	09163	0589
2000	0188	34604		2769	14907	1824	14092	0499
2500	0167	34642		2773	14984	2069	19761	0463
3000	0157	34668		2776	15066	2301	26350	0446
3500	0155 B	34678		2777	15153	2531	34076	0451

C-REF-NO 006	YR 1965	DEPTH C 3889	WAVES 1 1822	AIR T 11.6	VIS 7
CONS. NO 008	MONTH 7	MXSAMPD 04	WAVES 2 2724	WET B 10.5	STN 010
LAT 49-340N	DAY 04	NO.DPTH 14	WND-DIR 180	WW-CODE 02	
LCN 138-400W	HR 22.8	W-COLOR 30	WND-SPD 06	CLD-TPE 7	
MARSD SQ 158	C/I 1802	W-TRNSP 12	BARO 1023.0	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
228	0000	110 B	32612		2494	14909
228	0010	1080	32577		2495	14903
228	0020	1058	32580		2499	14897
228	0030	0919	32639		2526	14849
228	0050	0658	32708		2569	14752
228	0075	0592	32728		2579	14730
228	0100	0533	32762		2589	14710
228	0125	0468 B	32837		2602	14689
228	0150	0441	33104		2626	14685
228	0175	0475	33456		2650	14708
228	0200	0466	33678		2669	14711
228	0249	0457	33817		2681	14717
228	0299	0442	33892		2688	14720
228	0399	0407	33983		2699	14723

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1100 B	32612		2494	14909	0000	00000	3024
0010	1080	32577		2495	14903	0030	00002	3019
0020	1058	32580		2499	14897	0061	00006	2982
0030	0919	32639		2526	14849	0089	00013	2721
0050	0658	32708		2569	14752	0140	00034	2314
0075	0592	32728		2579	14730	0197	00070	2222
0100	0533	32762		2589	14710	0252	00119	2132
0125	0468 B	32837		2602	14688	0304	00179	2007
0150	0441	33104		2626	14685	0352	00246	1781
0175	0475	33456		2650	14708	0394	00316	1555
0200	0466	33678		2669	14711	0431	00387	1382
0225	0461	3378 E		2677	14715	0464	00461	1304
0250	0457	33819		2681	14718	0497	00540	1271
0300	0443	3391 C		2689	14721	0559	00715	1196
0400	0407	33983		2699	14723	0675	01130	1108

C-REF-NO 006	YR 1965	DEPTH C 3880	WAVES 1 2023	AIR T 11.6	VIS 3
CONS. NO 009	MONTH 7	MXSAMPD 15	WAVES 2 1824	WET B 11.6	STN 011
LAT 49-410N	DAY 05	NO.DPTH 20	WND-DIR 200	WW-CODE 45	
LON 140-400W	HR 05.3	W-COLOR	WND-SPD 06	CLD-TPE X	
MARSD SQ 159	C/I 1802	W-TRNSP	BARO 1017.0	CLD-AMT 9	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
053	0000	110 B	32591		2492	14909
053	0010	1090	32581		2493	14907
053	0020	1091	32583		2493	14909
053	0030	0948	32611		2520	14859
053	0050	0712	32691		2561	14773
053	0074	0630	32717		2574	14745
053	0099	0573	32730		2582	14726
053	0124	0491	32802		2597	14697
053	0149	0491	33188		2627	14707
053	0174	0480	33564		2658	14711
053	0199	0475	33723		2671	14715
053	0249	0448	33791		2680	14713
053	0298	0418	33857		2688	14710
053	0398	0395	33961		2699	14718
058	0496	0383	34066		2708	14731
058	0594	0371	34135		2715	14743
058	0797	0336	34254		2728	14763
058	0994	0298	34339		2738	14781
058	1191	0268	34404		2746	14802
058	1494	0234	34474		2754	14839

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1100 B	32591		2492	14909	0000	00000	3040
0010	1090	32581		2493	14907	0031	00002	3033
0020	1091	32583		2493	14909	0061	00006	3035
0030	0948	32611		2520	14859	0090	00014	2786
0050	0712	32691		2561	14773	0142	00035	2395
0075	0628	32717		2574	14744	0201	00072	2273
0100	0569	32729		2582	14725	0257	00122	2197
0125	0490	32815		2598	14697	0311	00184	2048
0150	0491	33205		2629	14707	0359	00251	1758
0175	0480	33573		2659	14711	0399	00318	1473
0200	0475	33726		2672	14715	0435	00387	1355
0225	0463	3378 E		2677	14715	0469	00460	1305
0250	0447	33792		2680	14713	0501	00539	1281
0300	0417	33859		2688	14710	0564	00716	1203
0400	0395	33963		2699	14718	0681	01133	1110
0500	0383	34069		2709	14731	0788	01629	1026

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0600	0370	34139		2715	14743	0889	02197	0969
0700	0354	34201		2722	14754	0984	02831	0913
0800	0335	34255		2728	14763	1074	03521	0860
1000	0297	34341		2738	14781	1239	05037	0767
1200	0266	34408		2746	14803	1387	06709	0696
1500	0234	34475		2755	14840	1588	09489	0626

C-REF-NO 006	YR 1965	DEPTH C 3909	WAVES 1 2423	AIR T 11.1	VIS 3
CONS. NO 010	MONTH 7	MXSAMPD 04	WAVES 2 2123	WCT B 11.1	STN 012
LAT 49-490N	DAY 05	NO.DPTH 14	WND-DIR 240	WW-CODE 60	
LON 142-400W	HR 16.1	W-COLOR 10	WND-SPD 06	CLD-TPE 7	
MARSD SQ 159	C/I 1802	W-TRNSP 13	BARO 1016.0	CLD-AMT 9	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
161	0000	102 B	32429		2494	14878
161	0010		32468		2497	14880
161	0020		32493		2499	14881
161	0030		32576		2525	14840
161	0050		32637		2558	14768
161	0074		32664		2572	14736
161	0099		32682		2580	14719
161	0124	0497 B	32753		2592	14699
161	0149	0473	33125		2624	14698
161	0174	0454	33465		2653	14699
161	0198	0419	33648		2671	14691
161	0248	0394	33725		2680	14690
161	0298	0367	33772		2687	14687
161	0397	0363	33925		2699	14704

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	TOT.EN	SWA
0000	1020 B	32429		2494	14878	0000	00000	3028
0010		32468		2497	14880	0030	00002	2998
0020		32493		2499	14881	0060	00006	2980
0030		32576		2525	14840	0089	00013	2735
0050		32637		2558	14768	0141	00034	2420
0075		32664		2572	14736	0200	00072	2289
0100		32681		2580	14718	0257	00123	2217
0125	0496 B	32765		2593	14699	0311	00185	2091
0150		33140		2626	14698	0360	00254	1787
0175		33475		2654	14699	0402	00323	1517
0200		33655		2672	14691	0438	00392	1347
0225	0402 B	3372 E		2679	14689	0471	00464	1287
0250		33727		2680	14689	0503	00543	1273
0300	0371 B	3379 C		2687	14689	0566	00719	1210
0400		33929		2699	14704	0682	01136	1103

C-REF-NO 006	YR 1965	DEPTH C 4220	WAVES 1 0622	AIR T 11.1	VIS 7
CONS. NO 011	MONTH 7	MXSAMPD 42	WAVES 2 0623	WET B 09.9	STN 301
LAT 49-590N	DAY 06	NO.DPTH 26	WND-DIR 060	WW-CODE 02	
LON 145-030W	HR 19.0	W-COLOR 20	WND-SPD 05	CLD-TPE 0	
MARSD SQ 159	C/I 1802	W-TRNSP 14	BARO 1026.0	CLD-AMT 2	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
190	0000	103 B	32571	690 B	2503	14884
190	0010	1003	32553	689 B	2506	14875
190	0020	0971	32598	703	2515	14866
190	0030	0832	32626	720	2539	14816
190	0049	0594	32700	733	2577	14726
190	0074	0548	32712	730	2583	14711
190	0099	0503	32733	733	2590	14697
190	0123	0453	32778	727 B	2599	14681
190	0148	0402	33005	633 B	2622	14667
190	0173	0379	33384	501 B	2655	14666
190	0197	0347	33633	401 B	2677	14660
190	0247	0342	33748	295 B	2687	14668
190	0296	0335	33823	191 B	2694	14674
190	0395	0350	33992	118 B	2706	14699
190	0494	0350	34115	069 B	2715	14717
200	0595	0342	34199	067 B	2723	14731
200	0791	0319	34320	064 B	2735	14756
200	0988	0288	34404	067 B	2744	14776
200	1186	0259	34463	068 B	2751	14798
200	1484	0231	34527	076 B	2759	14837
200	1982	0196	34602	143 B	2768	14907
200	2479	0173 B	34641	200	2773	14982
200	2975	0160	34675	272	2776	15063
200	3474	0152 B	34689	302	2778	15147
200	3974	0151	34704	335	2779	15234
200	4174	0152	34700	342	2779	15270

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1030 B	32571	690 B	2503	14884	0000	00000	2939
0010	1003	32553	689 B	2506	14875	0029	00002	2911
0020	0971	32598	703	2515	14866	0058	00006	2830
0030	0832	32626	720	2539	14816	0086	00013	2604
0050	0589	32701	733	2577	14724	0134	00032	2236
0075	0546	32713	730	2583	14711	0190	00068	2181
0100	0501	32733	734	2590	14697	0244	00116	2118
0125	0448	32790	722 B	2600	14680	0296	00176	2022
0150	0400	33035	623 B	2625	14667	0344	00244	1792
0175	0376	33409	492 B	2657	14666	0385	00312	1489

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0200	0346	3365 B	393 B	2679	14660	0420	00379	1282
0225	0339 B	3373 G	333 C	2686	14663	0452	00448	1214
0250	0341	33753	288 B	2687	14668	0482	00522	1203
0300	0335	33830	186 B	2694	14675	0541	00688	1142
0400	0350	33999	115 B	2706	14700	0651	01081	1037
0500	0350	34121	068 B	2716	14718	0752	01544	0953
0600	0342	34203	067 B	2723	14732	0845	02069	0891
0700	0331	34270	065 B	2730	14745	0932	02651	0837
0800	0318	34325	064 B	2735	14757	1015	03284	0789
1000	0286	34408	067 B	2745	14778	1166	04677	0706
1200	0257	34467	068 B	2752	14800	1303	06218	0643
1500	0230	34530	078 B	2759	14839	1489	08794	0581
2000	0195	34604	145 B	2768	14910	1765	13737	0508
2500	0172 B	34643	203	2773	14986	2014	19492	0469
3000	0159	34676	274	2776	15067	2247	26104	0444
3500	0152 B	34690	304	2778	15151	2473	33685	0438
4000	0151	34701	334	2779	15239	2698	42453	0442

C-REF-NO 006	YR 1965	DEPTH C 4220	WAVES 1 00X0	AIR T 14.4	VIS 1
CONS. NO 012	MONTH 7	MXSAMPD 04	WAVES 2 00XX	WET B 13.3	STN 302
LAT 50-000N	DAY 08	NO.DPTH 14	WND-DIR CALM	WW-CODE 45	
LON 144-520W	HR 09.2	W-COLOR 40	WND-SPD 00	CLD-TPE X	
MARSD SQ 195	C/I 1802	W-TRNSP 15	BARO 1028.0	CLD-AMT 9	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
092	0000	109 B	32564	689 B	2492	14905
092	0010	1036	32566	691 B	2501	14887
092	0020	0982	32587	708 B	2512	14870
092	0030	0922	32606	707 B	2523	14849
092	0050	0632	32686	718 B	2571	14741
092	0075	0548	32707	709 B	2583	14712
092	0100	0506	32723	694 B	2589	14699
092	0125	0438	32793	653 B	2602	14675
092	0150	0390	33224	572 B	2641	14665
092	0175	0365	33571	488 B	2671	14663
092	0200	0345	33671	386 B	2681	14660
092	0250	0346	33775	292 B	2689	14670
092	0300	0339	33836	189 B	2694	14676
092	0400	0364	33987	121 B	2704	14706

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1090 B	32564	689 B	2492	14905	0000	00000	3043
0010	1036	32566	691 B	2501	14887	0030	00002	2955
0020	0982	32587	708 B	2512	14870	0059	00006	2855
0030	0922	32606	707 B	2523	14849	0088	00013	2750
0050	0632	32686	718 B	2571	14741	0138	00034	2298
0075	0548	32707	709 B	2583	14712	0195	00070	2187
0100	0506	32723	694 B	2589	14699	0249	00118	2131
0125	0438	32793	653 B	2602	14675	0301	00178	2009
0150	0390	33224	572 B	2641	14665	0347	00242	1640
0175	0365	33571	488 B	2671	14663	0385	00305	1357
0200	0345	33671	386 B	2681	14660	0418	00368	1264
0225	0343 B	33734	330 C	2686	14664	0449	00436	1217
0250	0346	33775	292 B	2689	14670	0480	00510	1191
0300	0339	33836	189 B	2694	14676	0538	00676	1141
0400	0364	33987	121 B	2704	14706	0650	01073	1060

C-REF-NO 006	YR 1965	DEPTH C 4220	WAVES 1 3224	AIR T 11.1	VIS 7
CONS. NO 013	MONTH 7	MXSAMPD 04	WAVES 2 3235	WET B 09.4	STN 303
LAT 49-570N	DAY 12	NO.DPTH 14	WND-DIR 320	WW-CODE 02	
LON 144-570W	HR 19.1	W-COLOR 10	WND-SPD 09	CLD-TPE 8	
MARSD SQ 159	C/I 1802	W-TRNSP 16	BARO 1019.0	CLD-AMT 7	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
191	0000	110 B	32570	718 B	2491	14909
191	0010	1106	32556	721 B	2489	14913
191	0020	1105	32557	710 B	2489	14914
191	0030	1072	32566	702 B	2495	14904
191	0049	0703	32666	699 B	2560	14769
191	0074	0593	32701	696 B	2577	14730
191	0099	0529	32728	682 B	2587	14708
191	0123	0467 B	32805	646 B	2600	14687
191	0148	0441	33135	575 B	2628	14685
191	0173	0413	33591	492 B	2668	14684
191	0197	0381	33668	379 B	2677	14675
191	0247	0370	33795	289 B	2688	14680
191	0296	0366 B	33870	187 B	2694	14688
191	0395	0362	34033	120 B	2708	14705

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1100 B	32570	718 B	2491	14909	0000	00000	3055
0010	1106	32556	721 B	2489	14913	0031	00002	3078
0020	1105	32557	710 B	2489	14914	0062	00006	3078
0030	1072	32566	702 B	2495	14904	0092	00014	3018
0050	0694 B	32669	699 B	2561	14766	0147	00036	2389
0075	0590	32702	696 B	2577	14729	0205	00073	2240
0100	0526	32728	681 B	2587	14707	0260	00122	2149
0125	0464 B	32824	641 B	2601	14687	0313	00183	2013
0150	0439	3318 B	569 B	2632	14685	0360	00248	1725
0175	0410	3360 B	482 B	2669	14683	0399	00313	1376
0200	0379	33677	371 B	2678	14675	0432	00378	1293
0225	0370 B	33745	317 C	2684	14676	0464	00447	1234
0250	0370	33800	282 B	2689	14681	0495	00522	1195
0300	0364	3389 C	197 D	2696	14688	0553	00686	1125
0400	0362	34039	118 B	2708	14705	0662	01073	1020

C-REF-NO 006	YR 1965	DEPTH C 4220	WAVES 1 00X0	AIR T 14.4	VIS 7
CONS. NO 014	MONTH 7	MXSAMPD 20	WAVES 2 0931	WET B 13.3	STN 304
LAT 50-000N	DAY 15	NO.DPTH 22	WND-DIR CALM	WW-CODE 14	
LON 145-000W	HR 19.4	W-COLOR 40	WND-SPD 00	CLD-TPE 8	
MARSD SQ 195	C/I 1802	W-TRNSP 16	BARO 1022.0	CLD-AMT 6	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
194	0000	119 B	32539	691 B	2472	14940
194	0003	1152				
194	0010	1129	32556	686 B	2484	14921
194	0020	1107	32562	696 B	2489	14915
194	0030	0933	32605	713 B	2521	14853
194	0050	0677	32665	725	2563	14759
194	0075	0586	32696	720 B	2577	14727
194	0100	0526	32718	700 B	2586	14707
194	0125	0463	32792	692 B	2599	14686
194	0150	0434	33174	590 B	2632	14683
194	0175	0400	33574	464 B	2668	14678
194	0200	0375	33674	375 B	2678	14673
194	0250	0353	33769	277 B	2688	14673
194	0300	0370	33879	181 B	2695	14690
194	0400	0356	33999	116 B	2706	14702
200	0500	0358	34125	072 B	2715	14721
200	0600	0343	34194	060 B	2722	14733
200	0800	0316	34317	059 B	2735	14756
200	1000	0287	34400	058 B	2744	14778
200	1200	0263	34453	Q062 B	2750	14802
200	1500	0229	34519	069 B	2758	14838
200	2000	0194 B	34596	124 B	2767	14909

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1190 B	32539	691 B	2472	14940	0000	00000	3233
0010	1129	32556	686 B	2484	14921	0032	00002	3117
0020	1107	32562	696 B	2489	14915	0063	00006	3077
0030	0933	32605	713 B	2521	14853	0092	00014	2768
0050	0677	32665	725	2563	14759	0144	00035	2370
0075	0586	32696	720 B	2577	14727	0202	00072	2239
0100	0526	32718	700 B	2586	14707	0257	00121	2157
0125	0463	32792	692 B	2599	14686	0310	00182	2036
0150	0434	33174	590 B	2632	14683	0358	00248	1721
0175	0400	33574	464 B	2668	14678	0397	00313	1389
0200	0375	33674	375 B	2678	14673	0430	00378	1291
0225	0359	3373 B	319 B	2684	14671	0462	00447	1236
0250	0353	33769	277 B	2688	14673	0493	00522	1202
0300	0370	33879	181 B	2695	14690	0552	00688	1140

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0400	0356	33999	116 B	2706	14702	0662	01082	1043
0500	0358	34125	072 B	2715	14721	0763	01547	0959
0600	0343	34194	060 B	2722	14732	0857	02076	0899
0700	0329	34259	058 B	2729	14744	0945	02663	0843
0800	0316	34317	059 B	2735	14756	1028	03300	0793
1000	0287	34400	058 B	2744	14778	1180	04703	0713
1200	0263	34453	062 B	2750	14802	1319	06272	0659
1500	0229	34519	069 B	2758	14838	1509	08895	0588
2000	0194 B	34596	124 B	2767	14909	1789	13890	0512

C-REF-NO 006	YR 1965	DEPTH C 4220	WAVES 1 3025	AIR T 10.5	VIS 7
CONS. NO 015	MONTH 7	MXSAMPD 04	WAVES 2 3026	WET B 09.9	STN 305
LAT 49-580N	DAY 19	NO.DPTH 15	WND-DIR 300	WW-CODE 02	
LON 145-000W	HR 19.7	W-COLOR 40	WND-SPD 09	CLD-TPE 3	
MARSD SQ 159	C/I 1802	W-TRNSP 14	BARO 1024.0	CLD-AMT 6	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
197	0000	111 B	32564	710 B	2488	14912
197	0003	1100				
197	0010	1099	32554	706 B	2490	14910
197	0020	1101	32554	704 B	2489	14912
197	0029	1097	32554	704 B	2490	14912
197	0049	0737	32689	717 B	2557	14783
197	0073	0627	32711	738 B	2573	14743
197	0098	0537	32731	710 B	2586	14711
197	0122	0508 B	32997	679 B	2610	14707
197	0147	0471	33313	571 B	2639	14700
197	0171	0405	33568	481 B	2667	14679
197	0196	0378	33694	379 B	2679	14674
197	0245	0353	33768	288 B	2688	14672
197	0294	0354	33836	219 B	2693	14682
197	0392	0367	33990	156 B	2704	14706

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1110 B	32564	710 B	2488	14912	0000	00000	3077
0010	1099	32554	706 B	2490	14910	0031	00002	3068
0020	1101	32554	704 B	2489	14912	0062	00006	3073
0030	1082 C	32560	704 B	2493	14907	0092	00014	3039
0050	0729	32691	718 B	2559	14780	0147	00036	2417
0075	0618	32708	737 B	2574	14740	0206	00074	2268
0100	0534	32748	709 B	2588	14710	0262	00123	2143
0125	0505 B	33035	668 B	2614	14706	0313	00182	1898
0150	0462	33350	560 B	2643	14697	0357	00244	1619
0175	0399	33595	464 B	2669	14678	0395	00306	1372
0200	0375	33704	368 B	2680	14673	0428	00370	1268
0225	0359	3375 C	315 B	2686	14672	0459	00438	1219
0250	0352	33775	280 B	2688	14673	0490	00512	1197
0300	0348 B	33848	213 B	2694	14680	0549	00678	1141
0400	0371	34003	155 B	2705	14709	0660	01075	1056

C-REF-NO 006	YR 1965	DEPTH C 4220	WAVES 1 2524	AIR T 11.6	VIS 1
CONS. NO 016	MONTH 7	MXSAMPD 42	WAVES 2 2724	WET B 11.6	STN 306
LAT 49-580N	DAY 21	NO.DPTH 26	WND-DIR 250	WW-CODE 45	
LON 144-580W	HR 19.2	W-COLOR 40	WND-SPD 05	CLD-TPE X	
MARSD SQ 159	C/I 1802	W-TRNSP 13	BARO 1024.0	CLD-AMT 9	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
192	0000	115 B	32522	695 B	2478	14926
192	0010	1133	32506	691 B	2480	14921
192	0020	1132	32507	673 B	2480	14923
192	0029	0958	32555	683 B	2514	14862
192	0049	0679	32654	697 B	2562	14759
192	0074	0603	32668	720 B	2573	14733
192	0098	0509	32674	694 B	2585	14699
192	0123	044C B	32848	641 B	2606	14677
192	0148	0475	33188	604 B	2629	14700
192	0172	0399	33495	485 B	2661	14676
192	0197	0384	33632	390 B	2674	14676
192	0246	0361	33703	304 B	2682	14675
192	0296	0357	33781	225 B	2688	14683
192	0394	0360	33905	149 B	2698	14702
192	0493	0362 B		111 B		
203	0592	0353		089 B		
203	0798	0323		069 B		
210	0997	0287		064 B		
210	1194	0262		062 B		
210	1493	0230		096 B		
210	1990	0195		139 B		
210	2489	0172 B		208		
210	2987	0159		Q 282		
210	3485	0151 B	34673	309	2777	15148
210	3977	0152	34682	343	2778	15235
210	4175	0153 B	34681	349	2777	15270

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1150 B	32522	695 B	2478	14926	0000	00000	3176
0010	1133	32506	691 B	2480	14921	0032	00002	3161
0020	1132	32507	673 B	2480	14923	0064	00007	3160
0030	0940	32561	684 B	2517	14855	0094	00014	2811
0050	0673	32656	698 B	2563	14757	0146	00035	2372
0075	0599	32667	720 B	2573	14732	0204	00072	2276
0100	0501	32682	690 B	2586	14696	0260	00122	2157
0125	0443 B	32873	639 B	2607	14679	0312	00182	1955
0150	0470	33217	595 B	2632	14698	0358	00247	1726
0175	0395	33518	472 B	2664	14675	0398	00312	1426

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0200	0382	33640	383 B	2675	14676	0433	00379	1323
0225	0369	3369 D	332 B	2680	14675	0465	00450	1276
0250	0360	33709	297 B	2682	14675	0497	00528	1254
0300	0357	33786	221 B	2689	14683	0559	00702	1196
0400	0360	33910	146 B	2698	14703	0676	01119	1114
0500	0362 B	3399 I	109 B	2705	14721	0785	01626	1062
0600	0352	3407 I	088 B	2712	14735	0890	02213	1001
0700	0339	3414 I	075 B	2719	14747	0988	02866	0939
0800	0323	3422 I	069 B	2726	14757	1079	03573	0876
1000	0287	3434 I	064 B	2740	14777	1244	05088	0754
1200	0261	3446 I	062 B	2751	14801	1387	06692	0654
1500	0229	3460 I	097 B	2765	14840	1567	09164	0529
2000	0194	3476 I	140 B	2781	14912	1801	13299	0393
2500	0172 B	3483 I	210	2788	14988	1986	17575	0336
3000	0159	3480 I	283	2786	15069	2164	22628	0358
3500	0151 B	34674	310	2777	15151	2370	29625	0448
4000	0152	34683	341	2778	15239	2602	38632	0456

C-REF-NO 006	YR 1965	DEPTH C 4220	WAVES 1 2821	AIR T 10.5	VIS 4
CONS. NO 017	MONTH 7	MXSAMPD 04	WAVES 2 2837	WET B 10.5	STN 307
LAT 50-020N	DAY 27	NO.DPTH 14	WND-DIR 280	WW-CODE 53	
LON 145-100W	HR 21.4	W-COLOR 40	WND-SPD 03	CLD-TPE 7	
MARSD SQ 195	C/I 1802	W-TRNSP 13	BARD 990.0	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
214	0000	108 B	32534	675 B	2491	14901
214	0010	1071	32540	664 B	2493	14900
214	0020	1071	32543	685 B	2494	14901
214	0030	1069	32543	686 B	2494	14902
214	0050	0643	32678	684 B	2569	14746
214	0075	0552	32704	704 B	2582	14713
214	0100	0505	32706	716 B	2588	14698
214	0125	0456	32757	720 B	2597	14682
214	0150	0418	33090	620 B	2627	14675
214	0174	0390	33474	492 B	2661	14672
214	0199	0378	33633	410 B	2674	14674
214	0249	0340	33708	306 B	2684	14667
214	0299	0350	33822	197 B	2692	14681
214	0399	0359	33991	126 B	2705	14703

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1080 B	32534	675 B	2491	14901	0000	00000	3049
0010	1071	32540	664 B	2493	14900	0031	00002	3031
0020	1071	32543	685 B	2494	14901	0061	00006	3031
0030	1069	32543	686 B	2494	14902	0092	00014	3030
0050	0643	32678	684 B	2569	14746	0145	00035	2318
0075	0552	32704	704 B	2582	14713	0202	00072	2194
0100	0505	32706	716 B	2588	14698	0257	00120	2143
0125	0456	32757	720 B	2597	14682	0310	00181	2055
0150	0418	33090	620 B	2627	14675	0358	00249	1768
0175	0389	33483	488 B	2661	14672	0398	00316	1446
0200	0377	33636	408 B	2675	14673	0433	00383	1322
0225	0356 B	3369 E	351 B	2681	14669	0466	00454	1263
0250	0340	33710	304 B	2684	14667	0497	00530	1233
0300	0337 D	3381 C	209 C	2692	14675	0557	00700	1160
0400	0360	33993	126 B	2705	14704	0669	01098	1051

C-REF-NO 006	YR 1965	DEPTH C 4220	WAVES 1 2021	AIR T 11.6	VIS 7
CONS. NO 018	MONTH 8	MXSAMPD 20	WAVES 2 2033	WET B 11.1	STN 308
LAT 50-040N	DAY 01	NO.DPTH 21	WND-DIR 200	WW-CODE 60	
LON 144-530W	HR 19.5	W-COLOR 40	WND-SPD 03	CLD-TPE 7	
MARSD SQ 195	C/I 1802	W-TRNSP 14	BARO 1018.0	CLD-AMT 7	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
195	0000	115 B	32535	669 B	2479	14926
195	0010	1135	32524	643	2481	14922
195	0020	1134	32545	649 B	2483	14924
195	0030	1130	32531	675 B	2482	14924
195	0050	0626	32682	735	2571	14739
195	0075	0548	32740	714 B	2585	14712
195	0100	0502	32724	696 B	2589	14697
195	0125	0453 B	32902	700 B	2609	14683
195	0150	0420	33239	614 B	2639	14678
195	0175	0429	33587	493 B	2666	14690
195	0200	0381	33667	408 B	2677	14675
195	0250	0366	33826	303 B	2691	14679
195	0300	0355	33839	199 B	2693	14683
195	0400	0368	33987	149 B	2704	14707
201	0498	0362	34100	110 B	2713	14722
201	0597	0351	34194	091 B	2722	14735
201	0794	0321		075 B		
201	0991	0288	34382	076 B	2742	14777
201	1189	0261	34442	084 B	2750	14799
201	1489	0229	34510	101 B	2758	14836
201	1992	0196	34577	150 B	2766	14908

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1150 B	32535	669 B	2479	14926	0000	00000	3166
0010	1135	32524	643	2481	14922	0032	00002	3151
0020	1134	32545	649 B	2483	14924	0063	00006	3136
0030	1130	32531	675 B	2482	14924	0095	00015	3141
0050	0626	32682	735	2571	14739	0150	00036	2294
0075	0548	32740	714 B	2585	14712	0206	00072	2163
0100	0502	32724	696 B	2589	14697	0260	00120	2126
0125	0453 B	32902	700 B	2609	14683	0311	00179	1943
0150	0420	33239	614 B	2639	14678	0356	00243	1658
0175	0429	33587	493 B	2666	14690	0395	00307	1409
0200	0381	33667	408 B	2677	14675	0429	00372	1302
0225	0367 B	3376 B	350 B	2685	14675	0461	00441	1223
0250	0366	33826	303 B	2691	14679	0491	00515	1172
0300	0355	33839	199 B	2693	14683	0550	00680	1155
0400	0368	33987	149 B	2704	14707	0662	01081	1065

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0500	0362	34102	109 B	2713	14723	0765	01556	0980
0600	0351	34196	091 B	2722	14736	0860	02092	0905
0700	0336	3426 C	080 B	2728	14747	0949	02683	0848
0800	0320	3432 C	075 B	2734	14758	1032	03324	0799
1000	0287	34385	076 B	2743	14778	1186	04743	0724
1200	0260	34445	084 B	2750	14800	1326	06326	0662
1500	0228	34514	102 B	2758	14838	1517	08959	0591
2000	0196	34578	151 B	2766	14910	1801	14046	0528

C-REF-NO 006	YR 1965	DEPTH C 4220	WAVES 1 1921	AIR T 12.2	VIS 5
CONS. NO 019	MONTH 8	MXSAMPD 04	WAVES 2 1033	WET B 11.6	STN 309
LAT 50-020N	DAY 03	NO.DPTH 15	WND-DIR 190	WW-CODE 50	
LON 144-550W	HR 19.6	W-COLOR 40	WND-SPD 03	CLD-TPE 7	
MARSD SQ 195	C/I 1802	W-TRNSP 14	BARO 1007.0	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
196	0000	117 B	32519	661 B	2474	14933
196	0003	1160 C				
196	0010	1142	32610	669 B	2486	14926
196	0020	1125	32587	657 B	2488	14921
196	0030	1100	32661	665 B	2498	14915
196	0050	0679	32724	672 B	2568	14761
196	0075	0571	32756	675 B	2584	14722
196	0100	0536	32712	682 B	2585	14711
196	0125	0490	32808	639 B	2597	14697
196	0150	0411	33183	577 B	2635	14673
196	0175	0407	33574	461 B	2667	14681
196	0200	0393	33673	374 B	2676	14681
196	0250	0388	33859	291 B	2691	14689
196	0300	0356	33932	217 B	2700	14685
196	0400	0355	34075	129 B	2712	14703

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SWA
0000	1170 B	32519	661 B	2474	14933	0000	00000	3213
0010	1142	32610	669 B	2486	14926	0032	00002	3099
0020	1125	32587	657 B	2488	14921	0063	00006	3089
0030	1100	32661	665 B	2498	14915	0093	00014	2994
0050	0679	32724	672 B	2568	14760	0147	00035	2328
0075	0571	32756	675 B	2584	14722	0204	00072	2177
0100	0536	32712	682 B	2585	14711	0258	00121	2173
0125	0490	32808	639 B	2597	14697	0312	00182	2053
0150	0411	33183	577 B	2635	14673	0359	00248	1691
0175	0407	33574	461 B	2667	14681	0398	00312	1396
0200	0393	33673	374 B	2676	14681	0432	00378	1309
0225	0390	3377 B	324 B	2684	14685	0464	00447	1233
0250	0388	33859	291 B	2691	14689	0494	00521	1169
0300	0356	33932	217 B	2700	14685	0551	00681	1086
0400	0355	34075	129 B	2712	14703	0655	01054	0985

C-REF-NO 006	YR 1965	DEPTH C 4220	WAVES 1 1022	AIR T 12.2	VIS 7
CONS. NO 020	MONTH 8	MXSAMPD 42	WAVES 2 0834	WET B 11.1	STN 310
LAT 50-020N	DAY 05	NO.DPTH 26	WND-DIR 100	WW-CODE 01	
LON 144-570W	HR 19.2	W-COLOR 40	WND-SPD 05	CLD-TPE 2	
MARSD SQ 195	C/I 1802	W-TRNSP 14	BARO 1011.0	CLD-AMT 4	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
192	0000	115 B	32517	679 B	2478	14926
192	0010	1143	32500	681 B	2478	14925
192	0020	1138	32503	672 B	2479	14925
192	0030	1111	32523	680 B	2485	14917
192	0050	0618	32671	689 B	2571	14735
192	0074	0547	32687	693 B	2581	14711
192	0099	0486	32727	691 B	2591	14690
192	0124	0428	32907	643 B	2612	14673
192	0149	0391	33330	604 B	2649	14667
192	0174	0378	33602	481 B	2672	14669
192	0198	0381	33677	385 B	2678	14675
192	0248	0360	33740	305 B	2685	14675
192	0298	0380	33841	222 B	2691	14694
192	0397	0357	33966	141 B	2703	14702
192	0496	0366	34088	113 B	2712	14724
201	0600	0353	34178	090 B	2720	14737
201	0800	0316	34303	065 B	2734	14756
201	1000	0288	34372	065 B	2742	14778
201	1200	0263	34429	061 B	2748	14801
201	1500	0231	34495	094 B	2756	14839
201	2000	0194	34568	139 B	2765	14909
201	2500	0173	34612	206	2770	14986
201	3000	0159 B	34641	Q280 B	2774	15066
201	3500	0153	34657	306 B	2775	15151
201	4000	0150 B	34669	334	2777	15238
201	4200	0152	34669	343	2776	15274

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1150 B	32517	679 B	2478	14926	0000	00000	3180
0010	1143	32500	681 B	2478	14925	0032	00002	3182
0020	1138	32503	672 B	2479	14925	0064	00007	3174
0030	1111	32523	680 B	2485	14917	0096	00015	3115
0050	0618	32671	689 B	2571	14735	0150	00036	2293
0075	0544	32687	693 B	2582	14710	0206	00072	2198
0100	0483	32731	689 B	2592	14689	0261	00121	2101
0125	0426	32923	642 B	2613	14672	0311	00178	1900
0150	0390	33344	600 B	2650	14667	0354	00239	1550
0175	0378	33607	476 B	2672	14669	0391	00299	1342

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0200	0380	33680	380 B	2678	14675	0424	00363	1291
0225	0369 B	3372 B	332 C	2682	14675	0456	00433	1255
0250	0361	33744	301 B	2685	14676	0487	00509	1228
0300	0380	33844	220 B	2691	14694	0548	00680	1176
0400	0357	33970	140 B	2703	14702	0661	01084	1066
0500	0366	34092	112 B	2712	14724	0765	01563	0991
0600	0353	34178	090 B	2720	14737	0862	02107	0922
0700	0335	34248	074 B	2727	14746	0952	02706	0858
0800	0316	34303	065 B	2734	14756	1036	03353	0803
1000	0288	34372	065 B	2742	14778	1191	04787	0735
1200	0263	34429	061 B	2748	14801	1334	06401	0677
1500	0231	34495	094 B	2756	14839	1530	09104	0608
2000	0194	34568	139 B	2765	14909	1819	14284	0533
2500	0173	34612	206	2770	14986	2081	20322	0492
3000	0159 B	34641	280 B	2774	15067	2326	27279	0469
3500	0153	34657	306 B	2775	15151	2564	35289	0463
4000	0150 B	34669	334	2777	15238	2801	44515	0463

1-REF-NO 006	YR 1965	DEPTH C 4220	WAVES 1 3622	AIR T 10.5	VIS 7
CONS. NO 021	MONTH 8	MXSAMPD 04	WAVES 2 3633	WET B 09.9	STN 311
LAT 49-590N	DAY 08	NO.DPTH 14	WND-DIR 360	WW-CODE 50	
LON 145-010W	HR 19.6	W-COLOR 40	WND-SPD 05	CLD-TPE 4	
MARSD SQ 159	C/I 1802	W-TRNSP 16	BARO 1018.0	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
196	0000	117 B	32534	690 B	2475	14933
196	0010	1172	32538	680 B	2475	14936
196	0020	1172	32541	679 B	2475	14937
196	0030	1008	32590	689 B	2508	14881
196	0050	0609	32703	686 B	2575	14732
196	0075	0560	32718	690 B	2582	14717
196	0100	0523	32788	692 B	2592	14707
196	0125	0463 B	32945	638 B	2611	14688
196	0150	0392	33350	594 B	2651	14668
196	0175	0396	33620	472 B	2672	14677
196	0200	0404	33704	388 B	2677	14686
196	0250	0390	33819	299 B	2688	14690
196	0300	0379	33868	216 B	2693	14694
196	0400	0365	33978	135 B	2703	14706

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1170 B	32534	690 B	2475	14933	0000	00000	3202
0010	1172	32538	680 B	2475	14936	0032	00002	3205
0020	1172	32541	679 B	2475	14937	0064	00007	3205
0030	1008	32590	689 B	2508	14881	0095	00014	2896
0050	0609	32703	686 B	2575	14732	0147	00035	2258
0075	0560	32718	690 B	2582	14717	0203	00071	2193
0100	0523	32788	692 B	2592	14706	0257	00119	2101
0125	0463 B	32945	638 B	2611	14688	0308	00177	1921
0150	0392	33350	594 B	2651	14668	0351	00238	1547
0175	0396	33620	472 B	2672	14677	0388	00299	1350
0200	0404	33704	388 B	2677	14686	0421	00363	1297
0225	0399	33770	337 B	2683	14689	0453	00433	1245
0250	0390	33819	299 B	2688	14690	0484	00508	1201
0300	0379	33868	216 B	2693	14694	0544	00675	1157
0400	0365	33978	135 B	2703	14706	0656	01077	1068

C-REF-NO 006	YR 1965	DEPTH		WAVES 1 3622	AIR T 09.9	VIS 6
CONS. NO 022	MONTH 8	MXSAMPD 04		WAVES 2 3623	WET B 09.4	STN 012
LAT 49-490N	DAY 09	NO.DPTH 14		WND-DIR 360	WW-CODE 15	
LON 143-150W	HR 09.1	W-COLOR		WND-SPD 05	CLD-TPE 8	
MARSD SQ 159	C/I 1802	W-TRNSP		BARO 1018.0	CLD-AMT 7	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
091	0000	117 B	32576		2479	14934
091	0010	1182	32550		2474	14939
091	0020	1184	32536		2473	14941
091	0030	1083	32561		2493	14908
091	0050	0687	32699		2565	14763
091	0075	0622	32719		2575	14742
091	0100	0588	32725		2579	14732
091	0125	0528	32793		2592	14713
091	0150	0491	33125		2622	14706
091	0175	0477	33491		2653	14709
091	0200	0462	33689		2670	14710
091	0250	0401	33741		2681	14693
091	0300	0374	33811		2689	14691
091	0400	0367	33973		2703	14707

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1170 B	32576		2479	14934	0000	00000	3171
0010	1182	32550		2474	14939	0032	00002	3213
0020	1184	32536		2473	14941	0064	00007	3229
0030	1083	32561		2493	14908	0096	00015	3040
0050	0687	32699		2565	14763	0150	00036	2357
0075	0622	32719		2575	14742	0208	00073	2265
0100	0588	32725		2579	14732	0265	00124	2222
0125	0528	32793		2592	14713	0319	00187	2105
0150	0491	33125		2622	14706	0369	00256	1818
0175	0477	33491		2653	14709	0411	00326	1531
0200	0462	33689		2670	14710	0448	00396	1369
0225	0432 B	3374 G		2678	14702	0481	00469	1299
0250	0401	33741		2681	14693	0514	00548	1271
0300	0374	33811		2689	14691	0576	00723	1195
0400	0367	33973		2703	14707	0690	01131	1074

C-REF-NO 006	YR 1965	DEPTH C 3909	WAVES 1 0122	AIR T 13.3	VIS 6
CONS. NO 023	MONTH 8	MXSAMPD 15	WAVES 2 0123	WET B 12.2	STN 011
LAT 49-420N	DAY 09	NO.DPTH 20	WND-DIR 010	WW-CODE 03	
LON 140-410W	HR 21.4	W-COLOR 10	WND-SPD 06	CLD-TPE 4	
MARSD SQ 159	C/I 1802	W-TRNSP 17	BARO 1019.0	CLD-AMT 7	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
214	0000	115 B	32559		2481	14927
214	0010	1264	32489		2454	14967
214	0020	1263	32495		2455	14968
214	0030	1209	32514		2467	14951
214	0050	0687	32681		2563	14763
214	0075	0614	32741		2577	14739
214	0100	0543	32801		2591	14715
214	0125	0519 B	32922		2603	14711
214	0150	0537	33173		2621	14726
214	0175	0522	33515		2650	14728
214	0200	0481	33737		2672	14718
214	0250	0411	33752		2681	14698
214	0300	0384 B	33813		2688	14695
214	0400	0385	33955		2699	14714
220	0500	0383	34114		2712	14732
220	0600	0370	34186		2719	14744
220	0800	0336	34327		2734	14765
220	1000	0304	34400		2742	14785
220	1200	0270	34468		2751	14805
220	1500	0234	34517		2758	14841

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1150 B	32559		2481	14927	0000	00000	3149
0010	1264	32489		2454	14967	0033	00002	3406
0020	1263	32495		2455	14968	0067	00007	3402
0030	1209	32514		2467	14951	0101	00016	3292
0050	0687	32681		2563	14763	0158	00038	2370
0075	0614	32741		2577	14739	0216	00075	2239
0100	0543	32801		2591	14715	0271	00124	2114
0125	0519 B	32922		2603	14711	0322	00183	1999
0150	0537	33173		2621	14726	0371	00251	1834
0175	0522	33515		2650	14728	0413	00322	1563
0200	0481	33737		2672	14718	0450	00393	1354
0225	0442	3378 I		2679	14707	0483	00465	1284
0250	0411	33752		2681	14697	0516	00544	1273
0300	0384 B	33813		2688	14695	0578	00719	1203
0400	0385	33955		2699	14714	0695	01136	1106
0500	0383	34114		2712	14732	0801	01623	0993

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT. EN	SVA
0600	0370	34186		2719	14744	0898	02171	0934
0700	0354	34261		2727	14754	0989	02778	0868
0800	0336	34327		2734	14765	1074	03430	0807
1000	0304	34400		2742	14785	1229	04864	0732
1200	0270	34468		2751	14805	1370	06448	0656
1500	0234	34517		2758	14841	1560	09081	0595

C-REF-NO 006	YR 1965	DEPTH C 3889	WAVES 1 0232	AIR T 12.7	VIS 7
CONS. NO 024	MONTH 8	MXSAMPD 04	WAVES 2 0232	WET B 11.6	STN 010
LAT 49-340N	DAY 10	NO.DPTH 14	WND-DIR 020	WW-CODE 02	
LON 138-400W	HR 04.7	W-COLOR	WND-SPD 10	CLD-TPE 6	
MARSD SQ 158	C/I 1802	W-TRNSP	BARO 1018.0	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
047	0000	130 B	32498		2448	14977
047	0010		32503		2451	14975
047	0019		32519		2451	14977
047	0029		32535		2477	14934
047	0049		32672		2563	14761
047	0073		32720		2575	14741
047	0097		32750		2583	14727
047	0122	0514 B	32791		2593	14706
047	0146	0499	33225		2629	14710
047	0171	0510	33578		2656	14723
047	0195	0500	33745		2670	14725
047	0244	0443	33814		2682	14711
047	0292	0414	33850		2688	14707
047	0390	0375	33947		2700	14708

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1300 B	32498		2448	14977	0000	00000	3464
0010		32503		2451	14975	0035	00002	3440
0020		32520		2453	14975	0069	00007	3418
0030	1134 C	32541		2482	14926	0102	00015	3141
0050	0674 B	32675		2565	14758	0157	00037	2358
0075	0617	32723		2576	14740	0215	00074	2256
0100	0567	3274 C		2583	14724	0271	00124	2184
0125	0510 B	3284 C		2597	14706	0325	00186	2053
0150	0501	33291		2634	14712	0372	00252	1705
0175	0509	33615		2659	14724	0412	00318	1475
0200	0495	3376 B		2672	14724	0448	00387	1351
0225	0466 B	3381 D		2679	14717	0481	00459	1285
0250	0438	33819		2683	14710	0513	00537	1251
0300	0404 B	3387 B		2690	14704	0574	00710	1183

C-REF-NO 006	YR 1965	DEPTH C 3774	WAVES 1 22	AIR T 12.7	VIS 7
CONS. NO 025	MONTH 8	MXSAMPD 04	WAVES 2 22	WET B 12.2	STN 009
LAT 49-260N	DAY 10	NO.DPTH 14	WND-DIR 020	WW-CODE 02	
LON 136-400W	HR 11.7	W-COLOR	WND-SPD 09	CLD-TPE 7	
MARSD SQ 158	C/I 1802	W-TRNSP	BARO 1018.0	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
117	0000	134 B	32477		2438	14991
117	0010	1338	32418		2434	14991
117	0020	1340	32417		2434	14993
117	0030	1123	32533		2484	14922
117	0050	0698	32663		2560	14767
117	0075	0634	32688		2571	14746
117	0100	0565	32733		2583	14723
117	0125	0546 B	32980		2605	14723
117	0150	0540	33432		2641	14730
117	0175	0515	33678		2663	14727
117	0200	0491	33743		2671	14723
117	0250	0475	33851		2682	14726
117	0300	0443	33884		2688	14721
117	0400	0398	33977		2700	14720

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1340 B	32477		2438	14991	0000	00000	3554
0010	1338	32418		2434	14991	0036	00002	3596
0020	1340	32417		2434	14993	0072	00007	3603
0030	1123	32533		2484	14922	0106	00016	3128
0050	0698	32663		2560	14767	0162	00038	2398
0075	0634	32688		2571	14746	0221	00076	2302
0100	0565	32733		2583	14723	0277	00126	2190
0125	0546 B	32980		2605	14723	0330	00187	1986
0150	0540	33432		2641	14730	0375	00250	1643
0175	0515	33678		2663	14727	0414	00315	1434
0200	0491	33743		2671	14722	0449	00382	1361
0225	0481 B	33804		2677	14723	0483	00456	1307
0250	0475	33851		2682	14726	0516	00535	1267
0300	0443	33884		2688	14721	0578	00711	1212
0400	0398	33977		2700	14720	0695	01128	1103

C-REF-NO 006 YR 1965 DEPTH C 3549 WAVES 1 0122 AIR T 13.8 VIS 6
 CONS. NO 026 MONTH 8 MXSAMPD 04 WAVES 2 0123 WET B 13.3 STN 008
 LAT 49-190N DAY 10 NO.DPTH 14 WND-DIR 010 WW-CODE 15
 LON 134-400W HR 18.3 W-COLOR 80 WND-SPD 06 CLD-TPE 4
 MARSD SQ 158 C/I 1802 W-TRNSP 10 BARO 1018.0 CLD-AMT 7 HW

O B S E R V E D

GMI	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
183	0000	139 B	32486		2429	15007
183	0010	1392	32475		2428	15010
183	0020	1382	32478		2430	15008
183	0030	1277 B	32517		2454	14975
183	0050	0755	32664		2553	14790
183	0075	0680	32686		2565	14764
183	0100	0601	32745		2579	14738
183	0125	0553 B	32998		2605	14726
183	0150	0572	33439		2638	14743
183	0175	0548	33663		2658	14741
183	0200	0533	33776		2669	14740
183	0250	0498	33815		2676	14735
183	0300	0435	33880		2688	14718
183	0400	0409	34022		2702	14725

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1390 B	32486		2429	15007	0000	00000	3644
0010	1392	32475		2428	15010	0037	00002	3659
0020	1382	32478		2430	15008	0073	00008	3640
0030	1277 B	32517		2454	14975	0109	00017	3414
0050	0755	32664		2553	14790	0168	00040	2472
0075	0680	32686		2565	14764	0229	00079	2361
0100	0601	32745		2579	14738	0286	00130	2223
0125	0553 B	32998		2605	14726	0339	00191	1980
0150	0572	33439		2638	14743	0385	00255	1676
0175	0548	33663		2658	14741	0425	00321	1483
0200	0533	33776		2669	14740	0461	00391	1384
0225	0518	33815 D		2673	14738	0496	00465	1344
0250	0498	33815		2676	14735	0529	00547	1320
0300	0435	33880		2688	14717	0593	00726	1207
0400	0409	34022		2702	14725	0708	01138	1081

C-REF-NO 006	YR 1965	DEPTH C 3275	WAVES 1 3521	AIR T 14.4	VIS 7
CONS. NO 027	MONTH 8	MXSAMPD 04	WAVES 2 3622	WET B 13.3	STN 007
LAT 49-100N	DAY 11	NO.DPTH 14	WND-DIR 350	WW-CODE 02	
LON 132-400W	HR 01.0	W-COLOR 80	WND-SPD 05	CLD-TPE 7	
MARSD SQ 158	C/I 1802	W-TRNSP 11	BARO 1017.0	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
010	0000	150 B	32579		2413	15044
010	0010	1474	32540		2415	15037
010	0020	1461	32544		2419	15035
010	0030	1309	32548		2450	14986
010	0049	0913	32632		2527	14849
010	0074	0711	32672		2559	14776
010	0099	0615	32761		2579	14743
010	0124	0612	32982		2597	14749
010	0148	0610	33515		2639	14759
010	0173	0599	33704		2655	14762
010	0198	0573	33755		2662	14756
010	0247	0523	33831		2674	14745
010	0297	0493	33882		2682	14741
010	0396	0435	33955		2694	14734

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1500 B	32579		2413	15044	0000	00000	3796
0010	1474	32540		2415	15037	0038	00002	3775
0020	1461	32544		2419	15035	0076	00008	3748
0030	1309	32548		2450	14986	0112	00017	3451
0050	0900	32634		2529	14845	0174	00042	2701
0075	0705	32674		2560	14774	0238	00082	2403
0100	0614	32765		2579	14743	0296	00134	2223
0125	0612	3301 B		2598	14750	0350	00196	2045
0150	0610	33540		2641	14760	0396	00261	1646
0175	0597	33711		2656	14761	0436	00327	1506
0200	0571	33759		2663	14755	0473	00398	1441
0225	0544	33800		2670	14749	0509	00475	1381
0250	0521	33835		2675	14744	0543	00559	1332
0300	0486 B	33889		2683	14739	0608	00742	1256
0400	0434	33956		2694	14734	0730	01177	1157

C-REF-NO 006	YR 1965	DEPTH C 2929	WAVES 1 3621	AIR T 14.9	VIS 6
CONS. NO 028	MONTH 8	MXSAMPD 15	WAVES 2 3622	WET B 13.8	STN 006
LAT 49-020N	DAY 11	NU.DPTH 20	WND-DIR 360	WW-CODE 50	
LON 130-400W	HR 07.4	W-COLOR	WND-SPD 02	CLD-TPE 7	
MAKSD SQ 158	C/I 1802	W-TRNSP	BARO 1016.0	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
074	0000	155 B	32603		2404	15060
074	0010	1556	32585		2401	15064
074	0020	1520	32582		2409	15054
074	0030	1382	32600		2439	15011
074	0050	1054	32591		2500	14901
074	0075	0862	32620		2534	14834
074	0100	0691	32668		2562	14773
074	0125	0651	32882		2584	14764
074	0150	0647	33190		2609	14770
074	0175	0633	33606		2643	14774
074	0200	0616	33759		2657	14774
074	0249	0574	33823		2668	14766
074	0299	0537	33880		2677	14760
074	0399	0442	33967		2694	14738
079	0493	0416 B	34039		2703	14744
079	0593	0397	34137		2713	14753
079	0793	0368	34297		2728	14777
079	0989	0318	34385		2740	14789
079	1187	0288	34470		2750	14811
079	1491	0238	34525		2758	14841

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1550 B	32603		2404	15060	0000	00000	3883
0010	1556	32585		2401	15064	0039	00002	3911
0020	1520	32582		2409	15054	0078	00008	3841
0030	1382	32600		2439	15011	0115	00017	3553
0050	1054	32591		2500	14901	0181	00044	2974
0075	0862	32620		2534	14834	0252	00089	2659
0100	0691	32668		2562	14773	0315	00145	2392
0125	0651	32882		2584	14764	0373	00211	2185
0150	0647	33190		2609	14770	0425	00284	1953
0175	0633	33606		2643	14774	0470	00359	1629
0200	0616	33759		2657	14774	0509	00434	1497
0225	0595	3381 D		2664	14770	0546	00515	1434
0250	0573	33824		2668	14765	0582	00602	1402
0300	0536	33881		2677	14759	0651	00795	1320
0400	0442	33968		2694	14738	0776	01240	1157
0500	0414 B	34046		2703	14744	0889	01760	1078

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0600	0396	34144		2713	14754	0993	02349	0994
0700	0382	34230		2721	14766	1090	02994	0922
0800	0366	34301		2729	14777	1180	03688	0860
1000	0316	34390		2741	14790	1343	05187	0752
1200	0281 B	3447 B		2750	14810	1487	06809	0669
1500	0237	34526		2758	14842	1679	09460	0592

1-RES-NO 006 YR 1965 DEPTH C 2529 WAVES 1 3621 AIR T 15.5 VIS 7
 CORR. NO 029 MONTH 8 MXSAMPD 04 WAVES 2 3621 WFT B 13.8 STN 005
 LAT 12-44.4 DAY 11 NO.DPTH 14 WND-DIR 360 WW-CODE 01
 LON 128-400W HR 14.4 W-COLOR 20 WND-SPD 01 CLD-TPE 6
 MARSD SQ 157 1802 W-TRNSP 13 BARO 1015.0 CLD-AMT 7 HW

O B S E R V E D

GMT	DEPTH	TEMP	SAL	OXYGEN	SGMT	SOUND
144	0000	164 B	32309		2361	15085
144	0010	1633	32278		2360	15084
144	0020	1533	32282		2383	15054
144	0030	1409	32154		2399	15014
144	0050	1068	32319		2477	14902
144	0075	0741	32584		2548	14787
144	0100	0685	32761		2570	14772
144	0125	0708	33216		2603	14791
144	0150	0730	33630		2632	14809
144	0175	0721	33823		2648	14812
144	0200	0697	33911		2659	14808
144	0250	0643	33979		2671	14796
144	0300	0593	33979		2678	14784
144	0400	0527 B	34079		2694	14775

I N T E R P O L A T E D

DEPTH	TEMP	SAL	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SAL
0000	1640 B	32309		2361	15085	0000	00000	4230
0010	1633	32278		2360	15084	0043	00002	4300
0020	1533	32282		2383	15054	0085	00009	4087
0030	1409	32154		2399	15014	0126	00019	3933
0050	1068	32319		2477	14902	0197	00047	3198
0075	0741	32584		2548	14787	0269	00092	2516
0100	0685	32761		2570	14772	0330	00147	2315
0125	0708	33216		2603	14791	0384	00209	2009
0150	0730	33630		2632	14809	0431	00275	1734
0175	0721	33823		2648	14812	0473	00344	1582
0200	0697	33911		2659	14808	0512	00418	1488
0225	0670	33958		2666	14802	0549	00498	1421
0250	0643	33979		2671	14796	0584	00584	1374
0300	0593	33979		2678	14784	0652	00775	1317
0400	0527 B	34079		2694	14775	0777	01223	1173

C-REF-NO 006	YR 1965	DEPTH C 2499	WAVES 1 3621	AIR T 15.5	VIS 7
CONS. NO 030	MONTH 8	MXSAMPD 24	WAVES 2 3621	WET B 14.4	STN 004
LAT 48-470N	DAY 11	NO.DPTH 22	WND-DIR 360	WW-CODE 02	
LON 127-400W	HR 17.7	W-COLOR 40	WND-SPD 01	CLD-TPE 8	
MARSD SQ 157	C/I 1802	W-TRNSP 15	BARO 1015.0	CLD-AMT 4	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
177	0000	156 B	32248		2374	15059
177	0010	1389	32264		2412	15006
177	0020	1271	32352		2442	14969
177	0030	1049	32414		2487	14894
177	0050	0726	32596		2551	14777
177	0075	0677	32774		2572	14764
177	0100	0730	33227		2600	14795
177	0125	0694	33607		2635	14790
177	0150	0688	33800		2651	14795
177	0175	0676	33890		2660	14795
177	0199	0664	33939		2665	14795
177	0249	0621	33981		2674	14787
177	0299	0580	34016		2682	14779
177	0399	0523	34062		2693	14773
184	0497	0482	34136		2703	14773
184	0598	0431	34200		2714	14769
184	0800	0387	34327		2729	14786
184	0998	0343	34402		2739	14802
184	1198	0301	34460		2748	14818
184	1496	0244	34532		2758	14844
184	1995	0190	34620		2770	14907
184	2399	0177	34644		2773	14971

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1560 B	32248		2374	15059	0000	00000	4163
0010	1389	32264		2412	15006	0040	00002	3808
0020	1271	32352		2442	14969	0077	00008	3522
0030	1049	32414		2487	14894	0110	00016	3092
0050	0726	32596		2551	14777	0166	00038	2484
0075	0677	32774		2572	14764	0226	00076	2292
0100	0730	33227		2600	14795	0281	00125	2027
0125	0694	33607		2635	14790	0328	00178	1700
0150	0688	33800		2651	14795	0368	00236	1552
0175	0676	33890		2660	14795	0407	00299	1472
0200	0663	33940		2666	14795	0443	00369	1422
0225	0643	33966		2670	14791	0478	00446	1380
0250	0620	33982		2674	14786	0513	00530	1342
0300	0579	34016		2682	14779	0579	00716	1272

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0600	0523	34063		2693	14773	0702	01158	1180
0900	0480	34138		2704	14773	0817	01684	1085
0600	0430	34201		2714	14769	0921	02274	0989
0700	0404 B	34267		2722	14776	1018	02917	0919
0800	0387	34327		2729	14786	1108	03611	0864
1000	0343	34403		2739	14802	1274	05136	0773
1200	0301	34461		2748	14818	1423	06813	0696
1300	0243	34533		2758	14845	1619	09519	0594
1000	0188	34617		2770	14907	1894	14421	0490

C-REF-NO 006	YR 1965	DEPTH C 1300	WAVES 1 3621	AIR T 14.9	VIS 7
CONS. NO 031	MONTH 8	MXSAMPD 10	WAVES 2 3621	WET B 13.3	STN 003
LAT 48-420N	DAY 11	NO.DPTH 18	WND-DIR 360	WW-CODE 02	
LON 126-400W	HR 22.5	W-COLOR 40	WND-SPD 05	CLD-TPE 1	
MARSD SQ 157	C/I 1802	W-TRNSP 12	BARO 1014.0	CLD-AMT 1	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
225	0000	160 B	32255		2366	15072
225	0010	1492	32212		2386	15039
225	0020	1246	32349		2447	14961
225	0030	1192	32395		2460	14944
225	0050	0869	32459		2520	14831
225	0075	0704	32644		2558	14773
225	0100	0697	32936		2582	14779
225	0125	0713	33517		2626	14797
225	0150	0737	33784		2643	14814
225	0175	0717	33886		2654	14811
225	0200	0702	33936		2660	14810
225	0250	0651	33997		2672	14799
231	0297	0616	34026		2678	14793
231	0397	0567 B	34069		2688	14790
231	0497	0512 B	34122		2699	14785
231	0598	0453	34174		2710	14778
231	0800	0409	34309		2725	14795
231	0999	0349	34376		2736	14804

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1600 B	32255		2366	15072	0000	00000	4243
0010	1492	32212		2386	15039	0042	00002	4051
0020	1246	32349		2447	14961	0079	00008	3478
0030	1192	32395		2460	14944	0114	00016	3350
0050	0869	32459		2520	14831	0175	00041	2784
0075	0704	32644		2558	14773	0241	00083	2423
0100	0697	32936		2582	14779	0299	00134	2200
0125	0713	33517		2626	14797	0349	00192	1792
0150	0737	33784		2643	14814	0392	00252	1629
0175	0717	33886		2654	14811	0432	00318	1530
0200	0702	33936		2660	14810	0470	00391	1476
0225	0677	33972		2666	14805	0507	00471	1421
0250	0651	33997		2672	14799	0542	00556	1371
0300	0614	34027		2679	14793	0609	00747	1308
0400	0565 B	34071		2688	14790	0737	01204	1227
0500	0510 B	34123		2699	14785	0856	01752	1131
0600	0452	34175		2710	14778	0966	02368	1034
0700	0426 C	3424 B		2718	14785	1067	03040	0962

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0800	0409	34309		2725	14795	1161	03765	0903
1000	0349	34376		2736	14804	1333	05350	0800

C-REF-NO 006	YR 1965	DEPTH 109	WAVES 1 3222	AIR T 15.5	VIS 7
CONS. NO 032	MONTH 8	MXSAMPD 01	WAVES 2 3622	WET B 13.8	STN 002
LAT 48-380N	DAY 12	NO.DPTH 7	WND-DIR 320	WW-CODE 02	
LON 126-000W	HR 01.3	W-COLOR 80	WND-SPD 06	CLD-TPE 6	
MARSD SQ 157	C/I 1802	W-TRNSP 09	BARO 1013.0	CLD-AMT 6	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
013	0000	155 B	32092		2365	15054
013	0010	1294	32140		2421	14973
013	0020	0878 E	32671		2535	14832
013	0030	0670	32738		2570	14754
013	0050	0679	33085		2596	14765
013	0075	0725	33531		2625	14793
013	0100	0714	33792		2647	14797

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1550 B	32092		2365	15054	0000	00000	4256
0010	1294	32140		2421	14973	0040	00002	3718
0020	0878 E	32671		2535	14832	0072	00007	2635
0030	0670	32738		2570	14754	0097	00013	2304
0050	0679	33085		2596	14765	0141	00031	2059
0075	0725	33531		2625	14793	0189	00061	1790
0100	0714	33792		2647	14797	0232	00099	1585

C-REF-NO 006	YR 1965	DEPTH 111	WAVES 1 3423	AIR T 12.2	VIS 6
CONS. NO 033	MONTH 8	MXSAMPD 01	WAVES 2 3423	WET B 11.6	STN 001
LAT 48-330N	DAY 12	NO.DPTH 7	WND-DIR 340	WW-CODE 03	
LON 125-330W	HR 03.2	W-COLOR 80	WND-SPD 07	CLD-TPE 8	
MARSD SQ 157	C/I 1802	W-TRNSP 08	BARO 1010.0	CLD-AMT 8	HW

O B S E R V E D

GMT	DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND
032	0000	120 B	32286		2451	14941
032	0010	1020	32697		2514	14883
032	0020	0953	32830		2536	14862
032	0030	0826	33270		2590	14822
032	0050	0724	33494		2622	14788
032	0075	0685	33763		2649	14781
032	0090	0675	33807		2654	14780

I N T E R P O L A T E D

DEPTH	T E M P	S A L	OXYGEN	SGMT	SOUND	DELTA-D	POT.EN	SVA
0000	1200 B	32286		2451	14941	0000	00000	3438
0010	1020	32697		2514	14883	0032	00001	2832
0020	0953	32830		2536	14862	0059	00006	2630
0030	0826	33270		2590	14822	0083	00012	2116
0050	0724	33494		2622	14788	0122	00028	1812
0075	0685	33763		2649	14781	0165	00054	1564

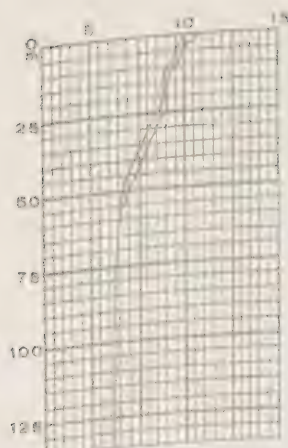
SECTION IV

Bathythermograms

CCGS "ST. CATHARINES"

Daily bathythermograms
and
OCEAN series bathythermograms

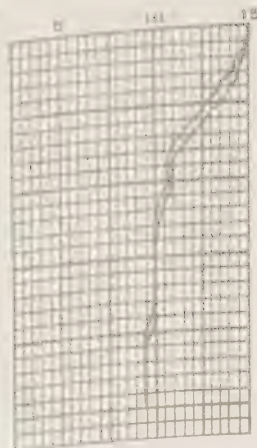
C.C.G S. "St. Catharines", Survey P-65-3



*65-07-02-22.8

48°33'N

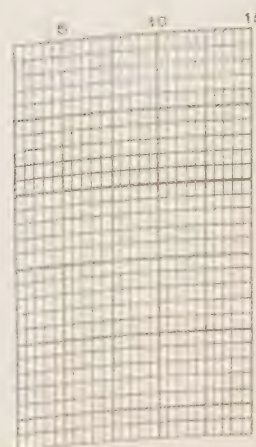
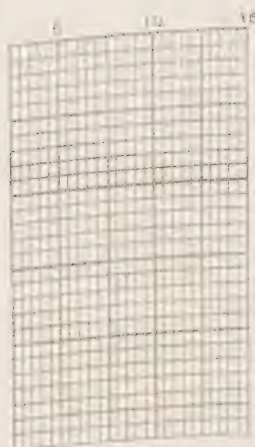
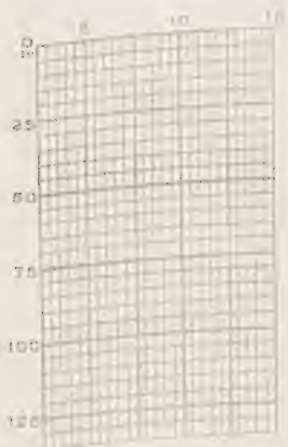
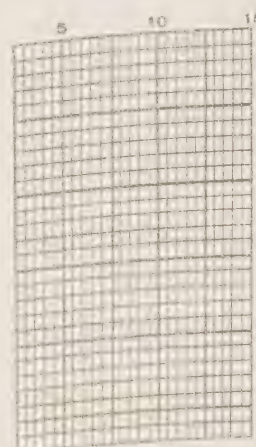
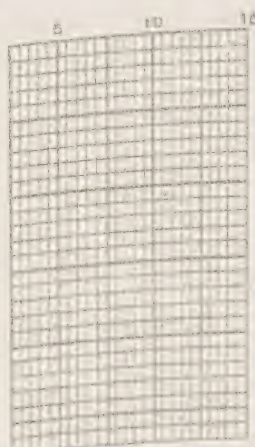
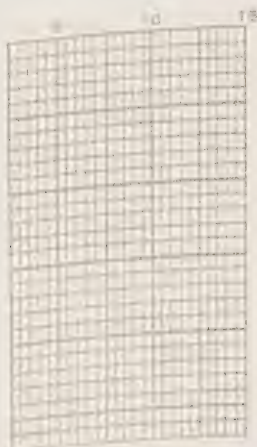
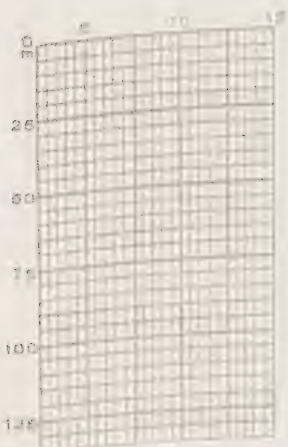
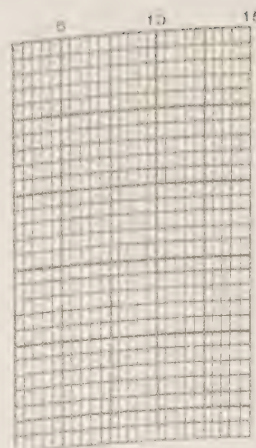
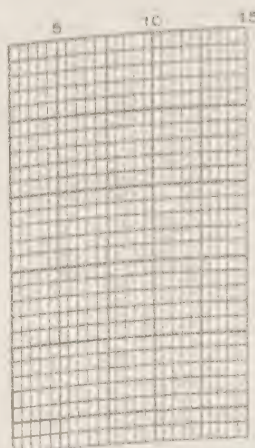
125°33'W



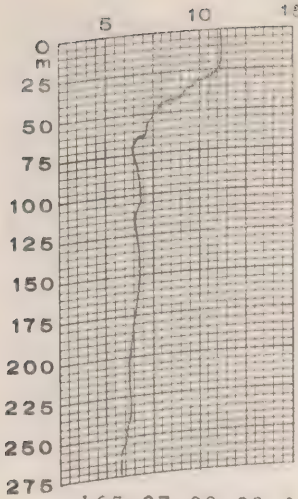
*65-07-03-00.7

48°38'N

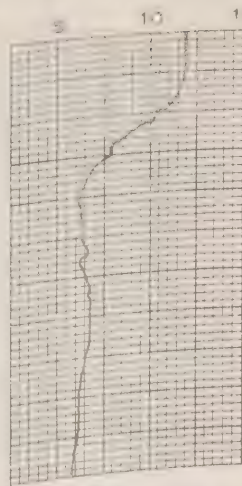
126°00'W



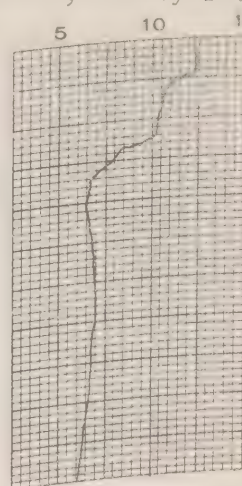
C.C.G.S. "S.L. Catharines", Survey P-65-3



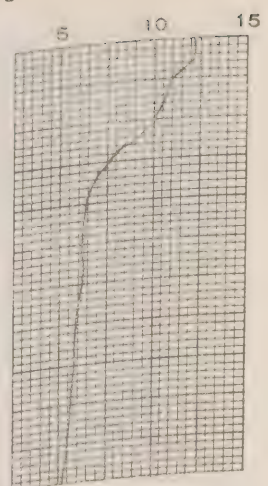
*65-07-03-03.2
48°42'N
126°40'W



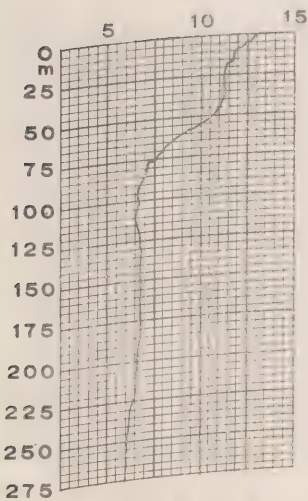
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48°47'N
127°40'W



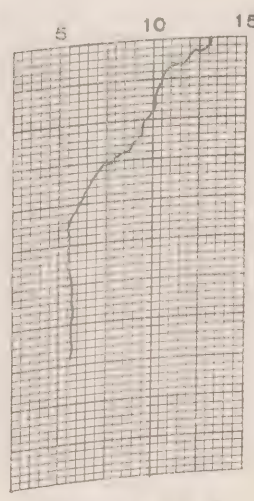
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48°51'N
128°40'W



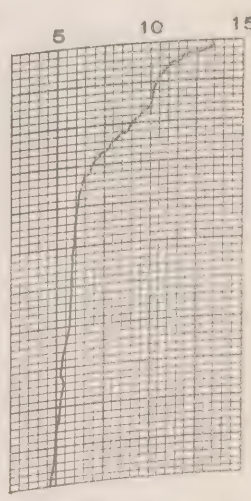
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48°56'N
129°40'W



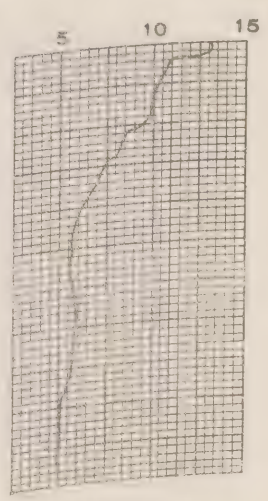
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49°02'N
130°40'W



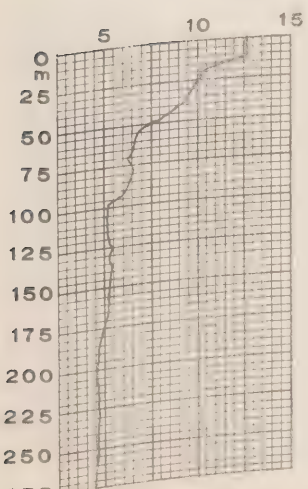
65-07-03-21.5
49°06'N
131°40'W



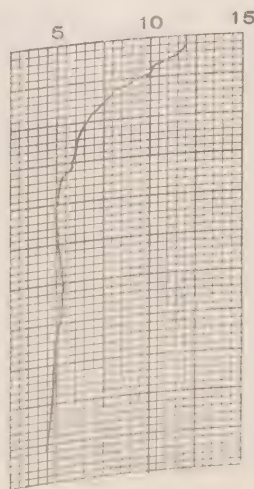
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49°10'N
132°40'W



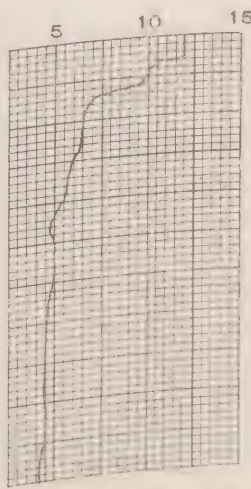
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49°15'N
133°40'W



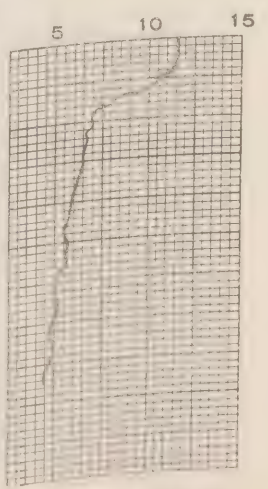
65-07-04-07.1
49°19'N
134°40'W



65-07-04-10.7
49°22'N
135°40'W

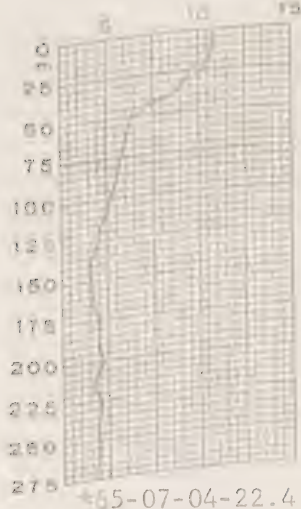


*65-07-04-14.0
49°26'N
136°40'W



65-07-04-19.0
49°30'N
137°40'W

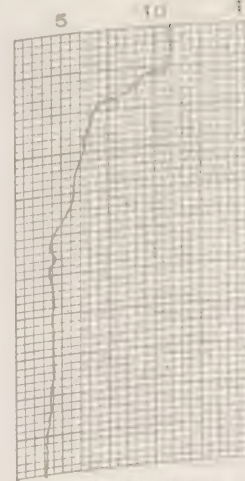
U.S.S. "St. Catharines", Survey P-69-1



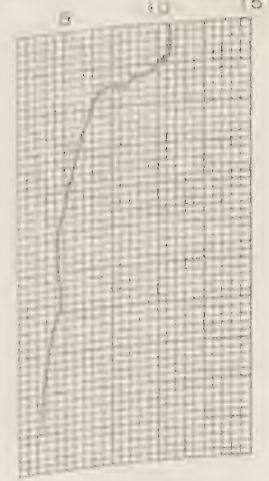
65-07-04-22.4
49°34'n
138°40'w



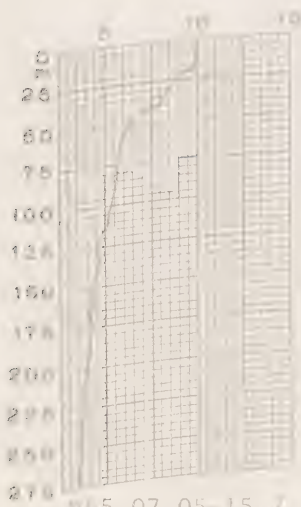
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49°36'n
139°40'w



*65-07-05-05.0
49°41'n
140°40'w



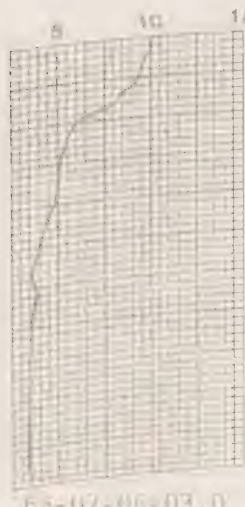
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49°40'n
141°40'w



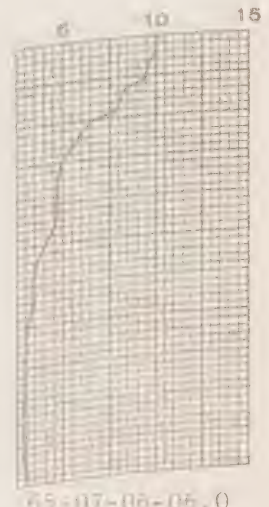
65-07-05-15.7
49°49'n
142°40'w



65-07-05-20.2
49°50'n
143°40'w



65-07-06-03.0
49°57'n
144°53'w



65-07-06-06.0
50°01'n
145°02'w



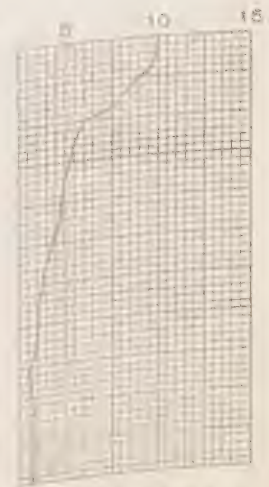
65-07-06-09.0
50°00'n
145°03'w



65-07-06-12.0
49°58'n
145°04'w

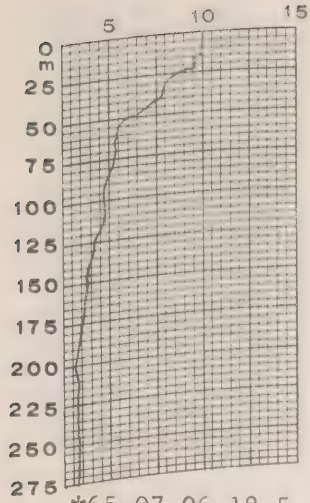


65-07-06-15.0
49°55'n
145°09'w

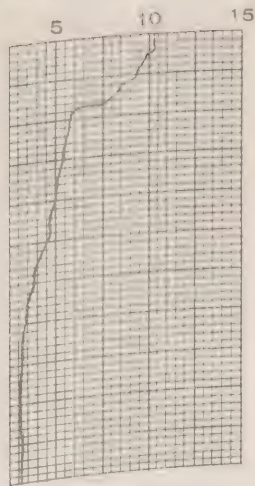


65-07-06-18.0
49°59'n
145°08'w

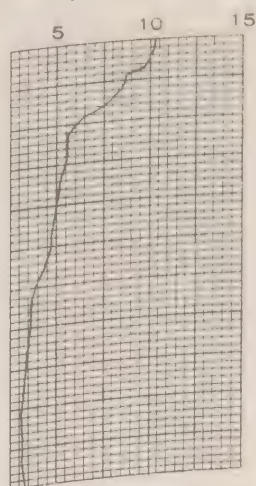
C.O.G.S. "St. Catharines", Survey P-65-3



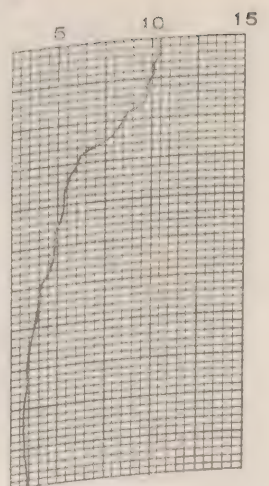
*65-07-06-18.5
49°59'N
145°03'W



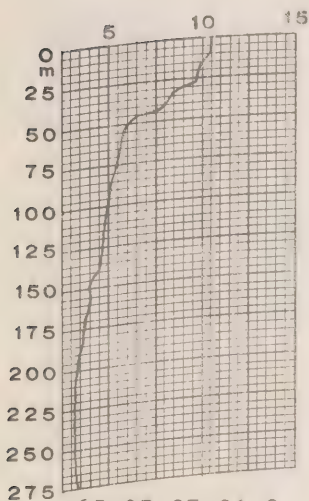
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49°57'N
145°00'W



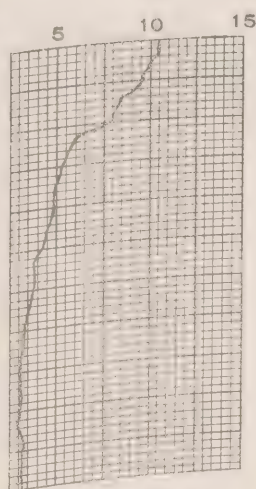
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49°57'N
145°04'W



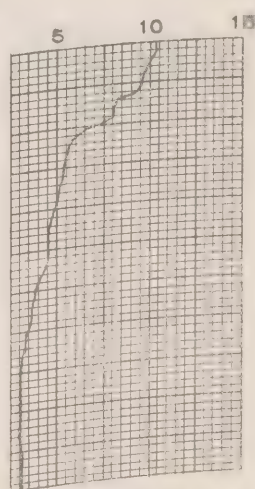
65-07-07-03.0
49°59'N
145°06'W



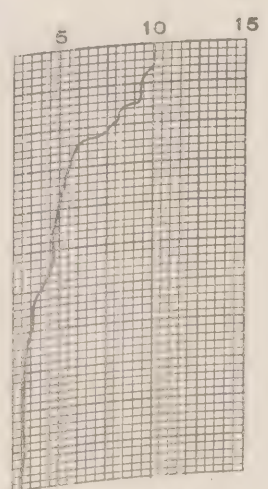
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49°59'N
145°09'W



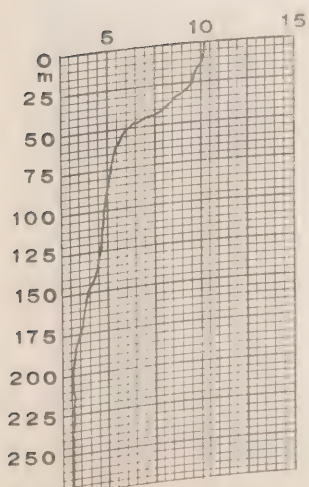
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50°00'N
144°58'W



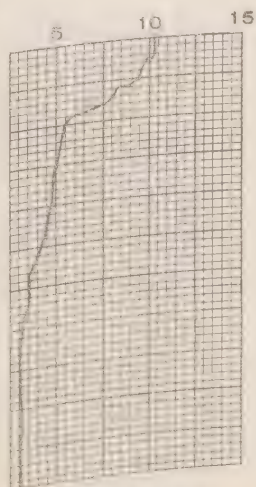
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50°02'N
145°01'W



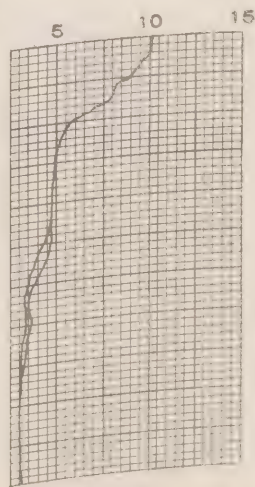
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50°02'N
145°03'W



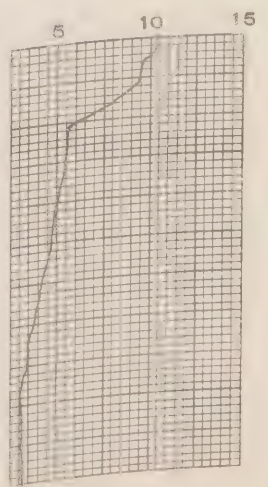
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50°02'N
145°06'W



65-07-07-21.0
50°05'N
145°07'W

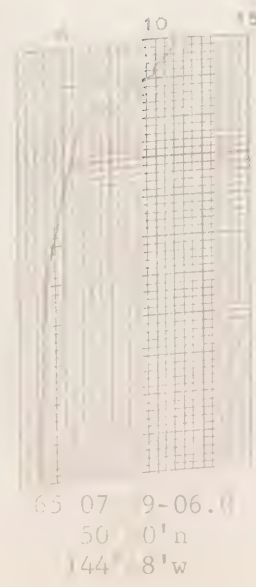
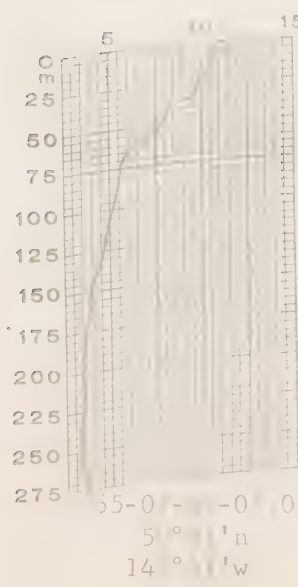
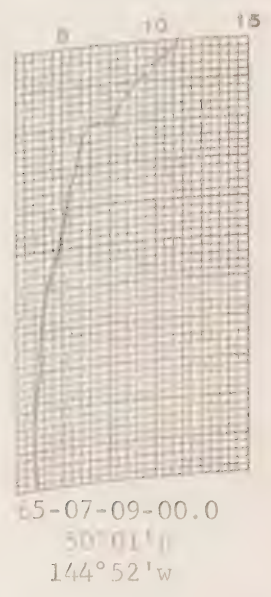
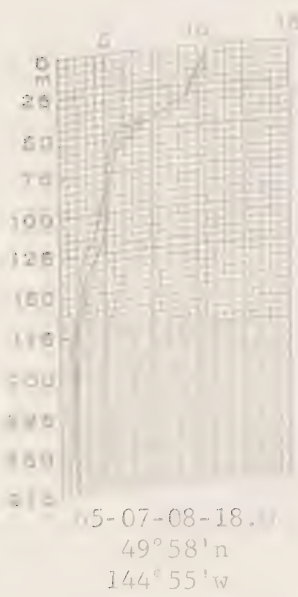
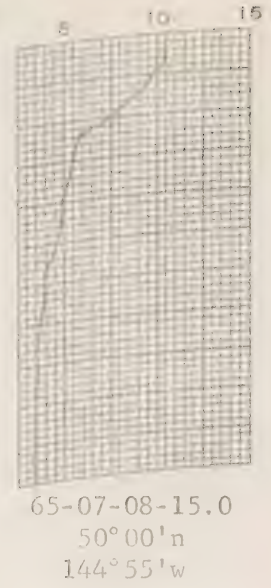
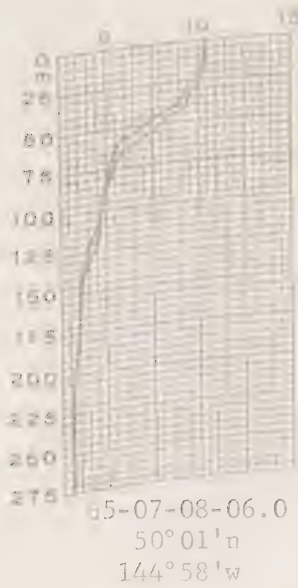


65-07-08-00.0
50°05'N
145°08'W

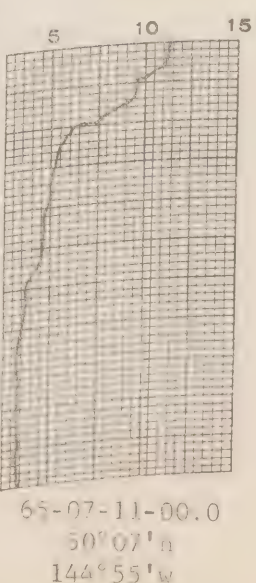
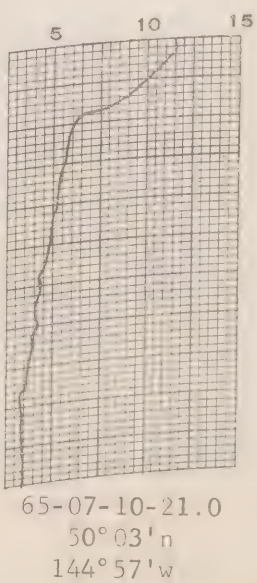
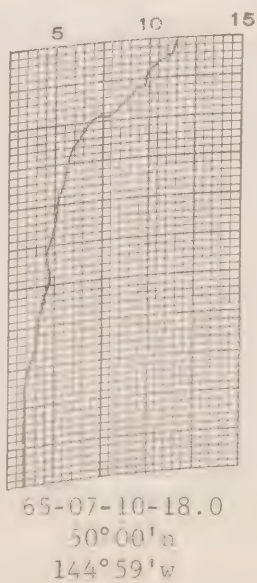
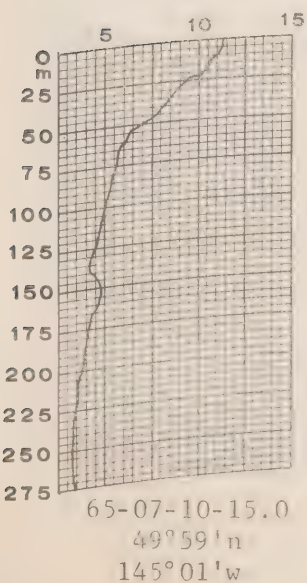
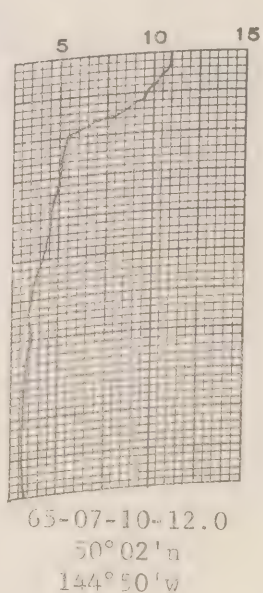
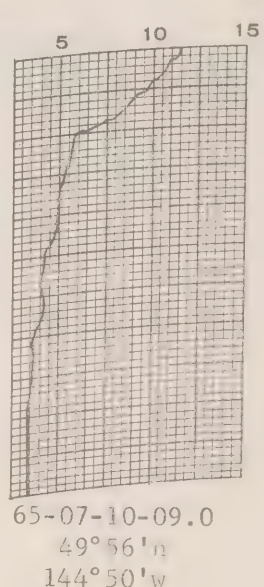
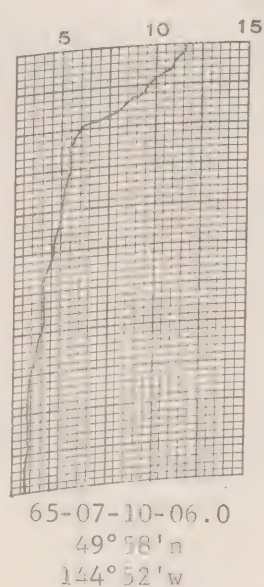
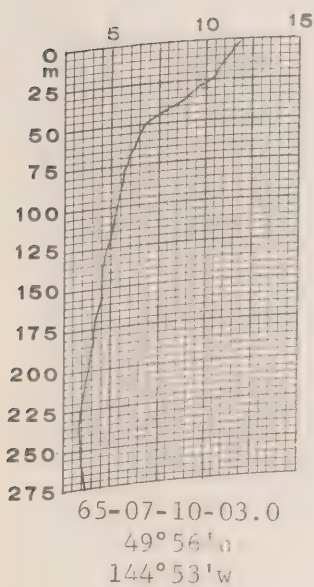
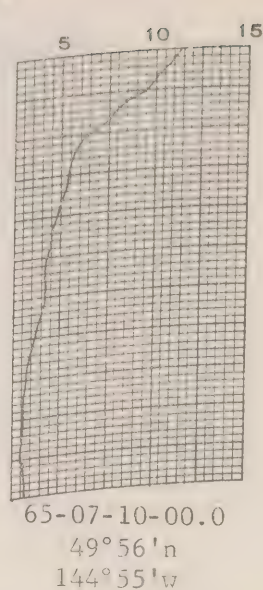
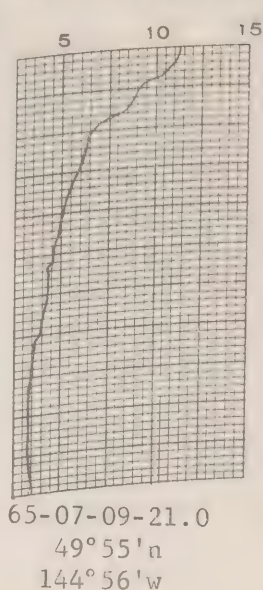
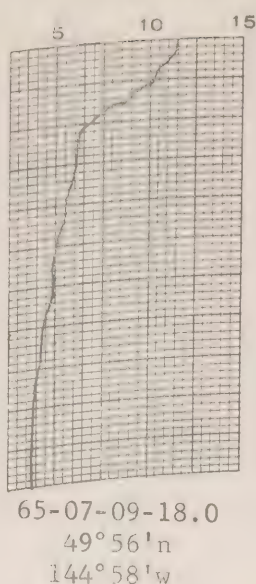
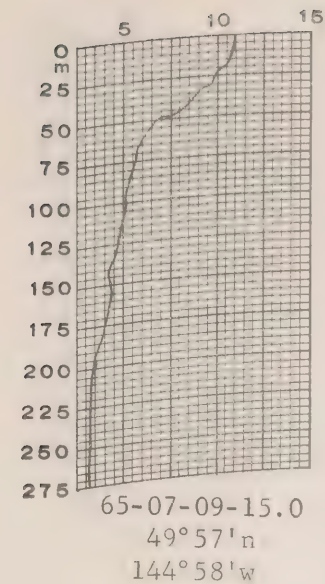


65-07-08-03.0
50°04'N
145°06'W

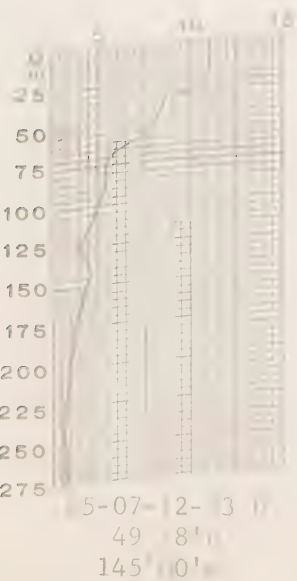
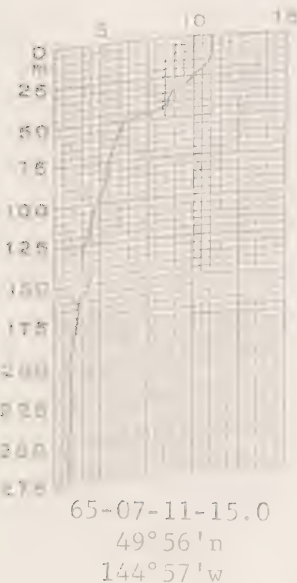
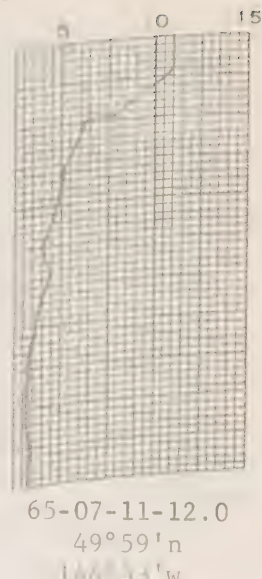
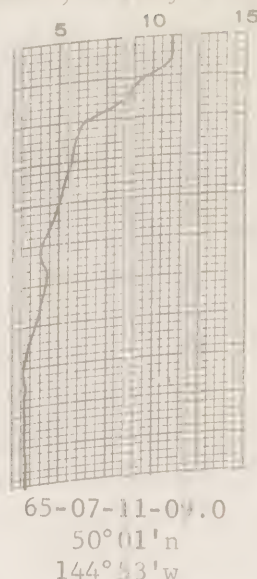
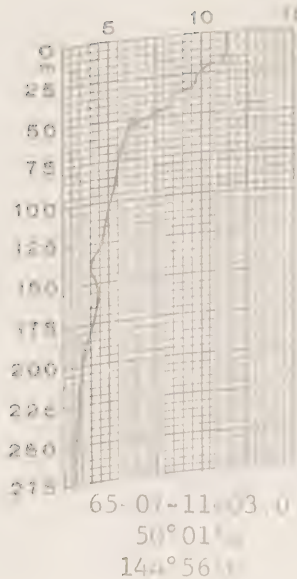
C. C. G. S. "St. Catharines", Survey P-65-1



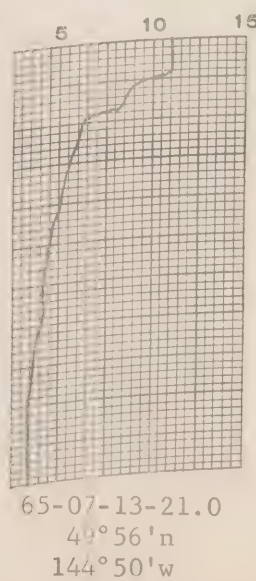
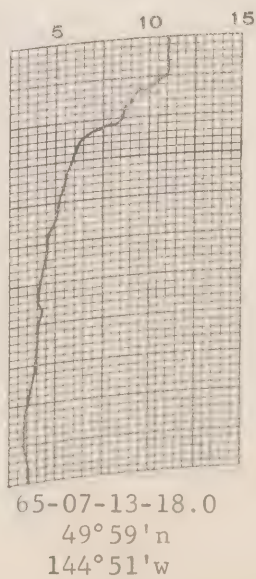
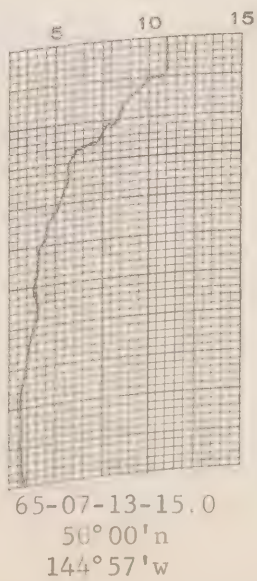
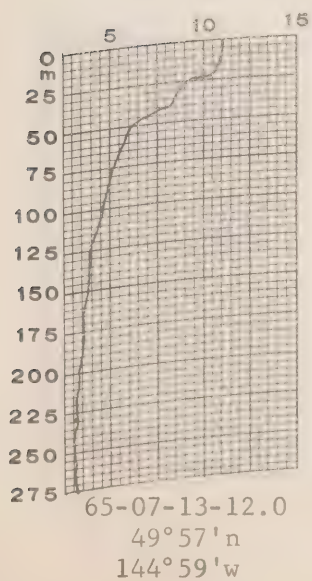
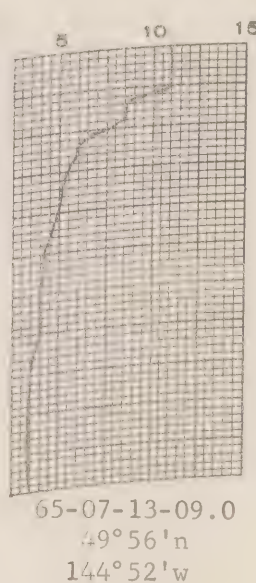
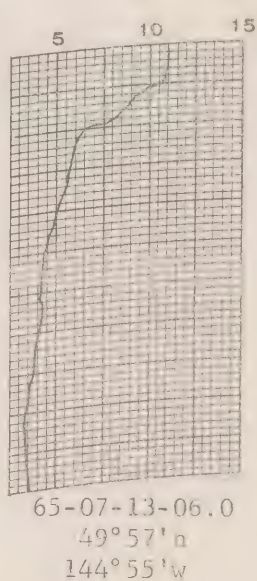
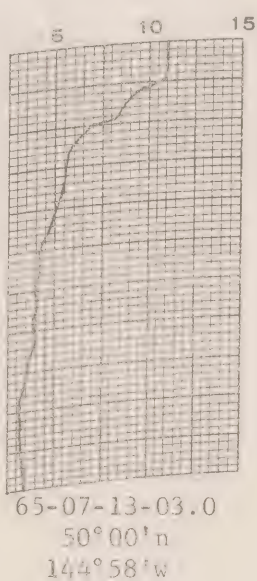
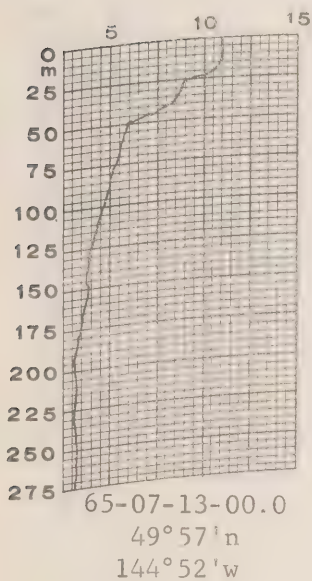
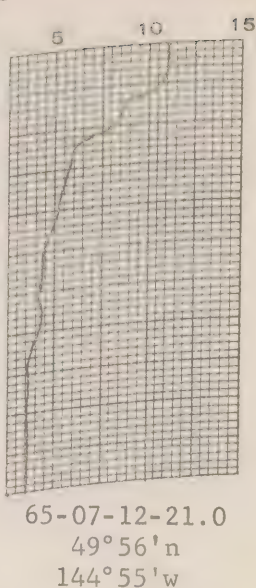
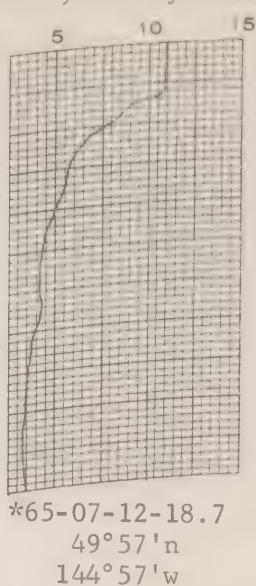
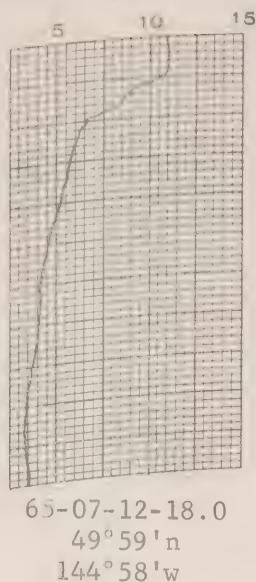
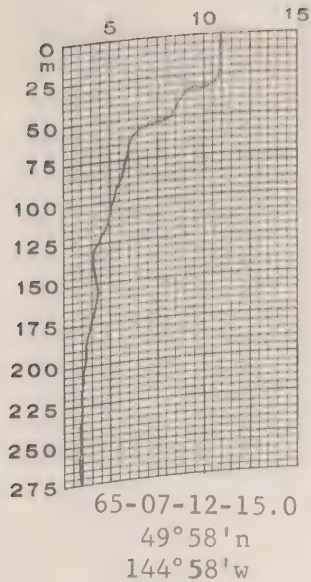
C.C.G.S. "St. Catharines", Survey P-65-3



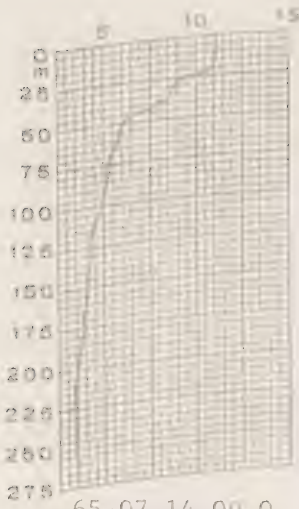
U. S. G. S. "Catharines", Survey P-65-3



C.C.G.S. "St. Catharines", Survey P-65-3



U.S.S. "St. Catharines", Survey P-65-3



65-07-14-00.0
49°57'N
144°50'W



65-07-14-03.0
50°00'N
144°00'W



65-07-14-06.0
50°02'N
145°00'W



65-07-14-09.0
50°03'N
144°56'W



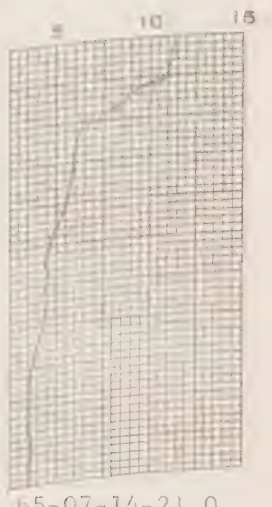
65-07-14-11.0
50°01'N
144°51'W



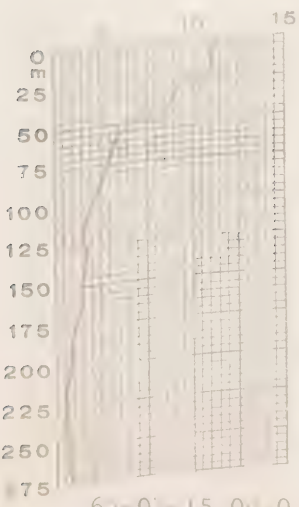
65-07-14-15.0
50°02'N
144°59'W



65-07-14-18.0
50°02'N
144°59'W



65-07-14-21.0
50°03'N
144°58'W



65-07-15-00.0
50°02'N
144°57'W



65-07-15-04.0
50°04'N
144°57'W

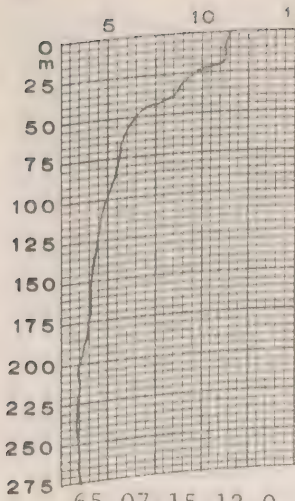


65-07-15-06.0
50°04'N
144°57'W

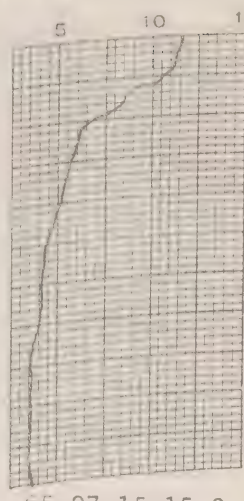


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144°59'W

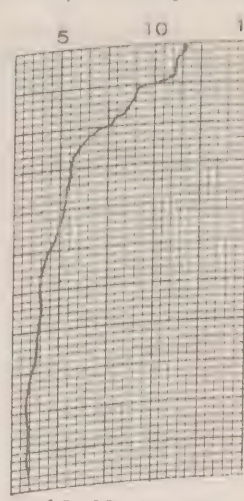
C.C.G.S. "St. Catharines", Survey P-65-3



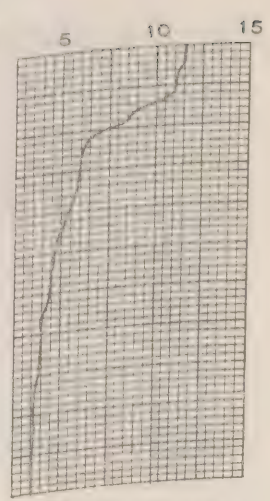
65-07-15-12.0
50°01'n
144°59'w



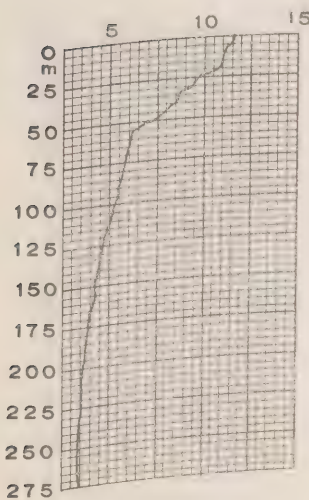
65-07-15-15.0
50°02'n
144°59'w



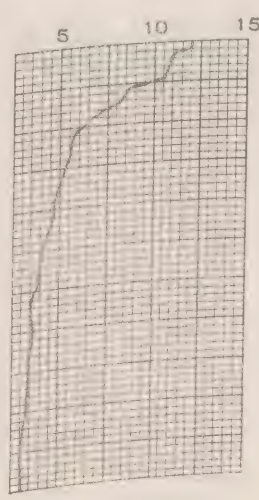
65-07-15-18.0
50°03'n
144°55'w



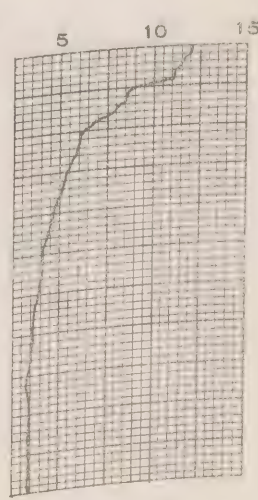
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50°00'n
145°00'w



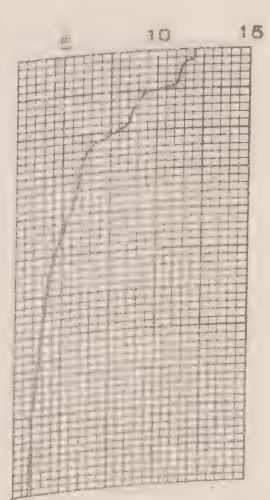
65-07-15-21.0
50°00'n
144°59'w



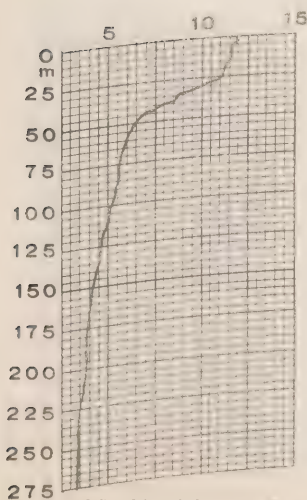
65-07-16-00.0
50°00'n
144°59'w



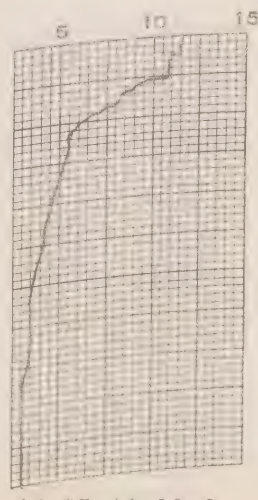
65-07-16-03.0
50°01'n
144°56'w



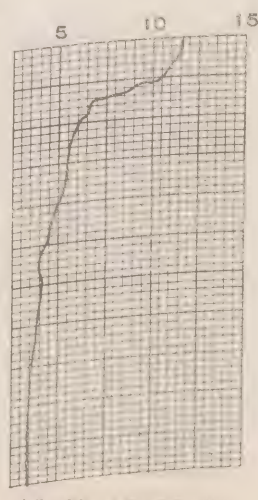
65-07-16-06.0
49°58'n
144°54'w



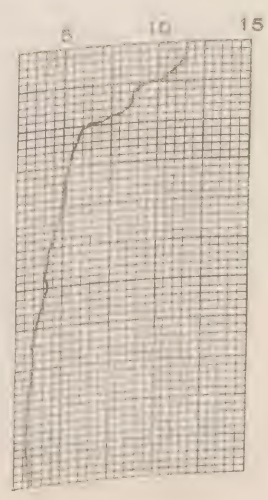
65-07-16-09.0
49°57'n
144°52'w



65-07-16-12.0
49°58'n
144°48'w

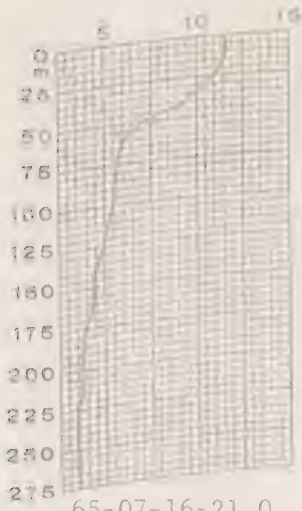


65-07-16-15.0
50°00'n
145°00'w



65-07-16-18.0
49°27'n
144°55'w

C.C.G.S. "St. Catharines", Survey P-65-3



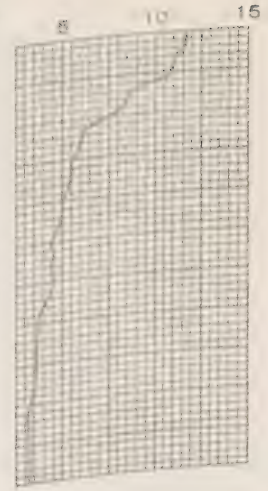
65-07-16-21.0
49° 57' n
144° 53' w



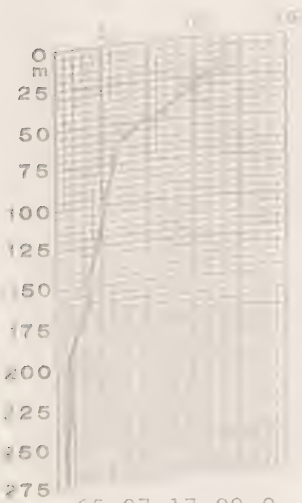
65-07-17-00.0
49° 56' n
144° 52' w



65-07-17-03.0
49° 54' n
144° 51' w



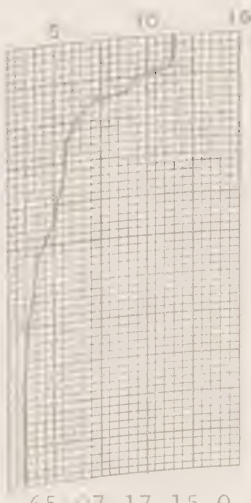
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144° 49' w



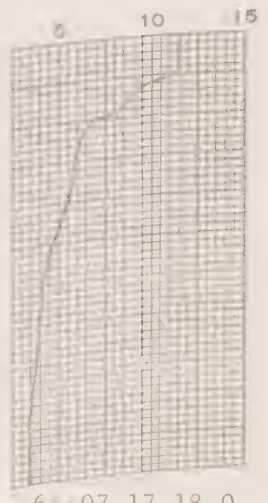
65-07-17-09.0
50° 02' n
145° 01' w



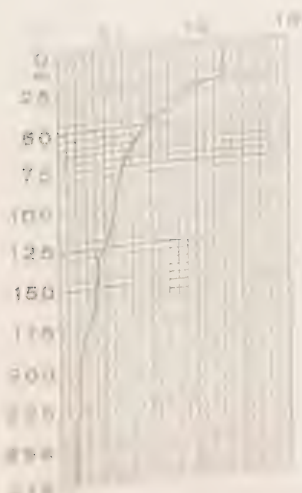
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50° 01' n
145° 00' w



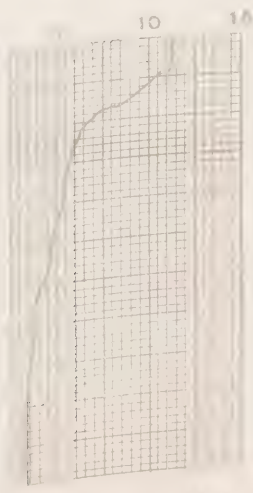
65-07-17-15.0
49° 59' n
144° 51' w



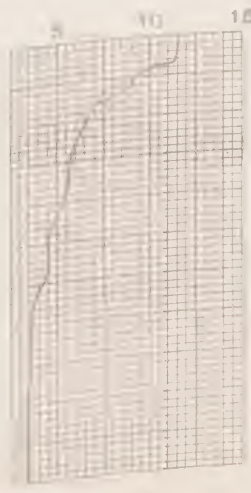
65-07-17-18.0
49° 58' n
144° 47' w



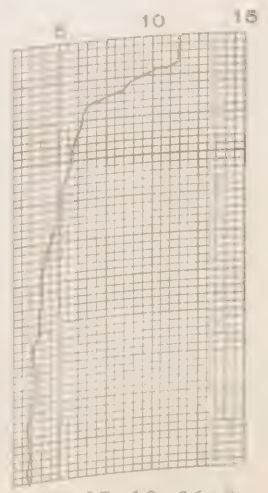
65-07-17-21.0
50° 01' n
145° 01' w



65-07-18-00.0
50° 03' n
144° 52' w

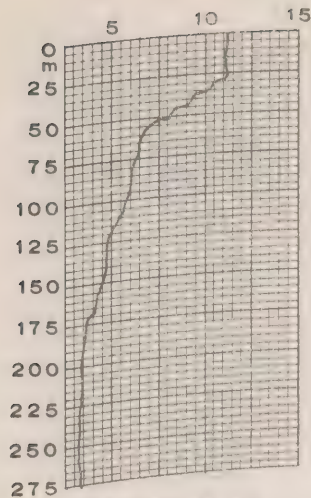


65-07-18-03.0
49° 59' n
144° 50' w

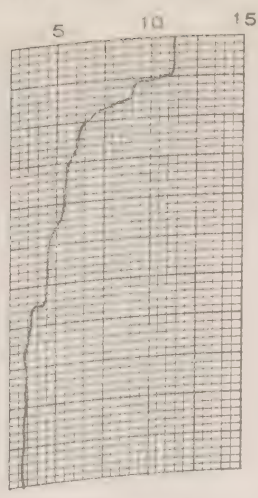


65-07-18-06.0
49° 58' n
144° 49' w

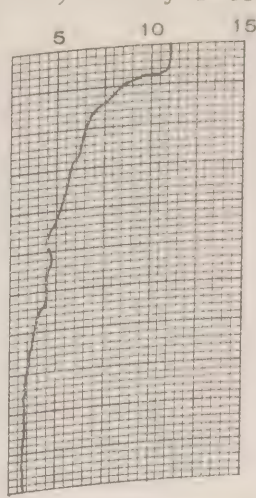
C C C.S "St. Catharines", Survey P-65-3



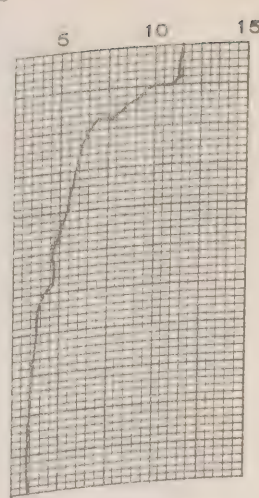
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145°01'w



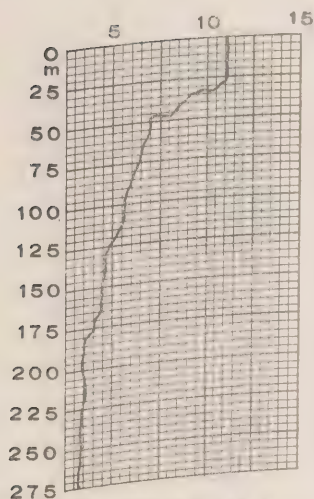
65-07-18-12.0
50°02'n
144°54'w



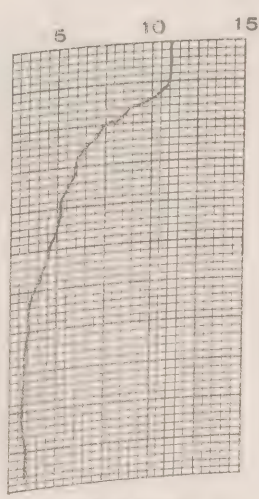
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50°00'n
145°00'w



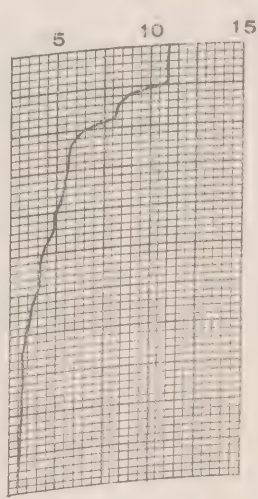
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50°00'n
144°52'w



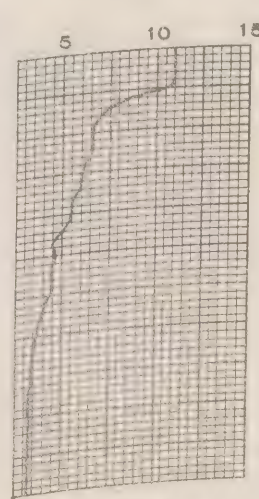
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50°01'n
145°00'w



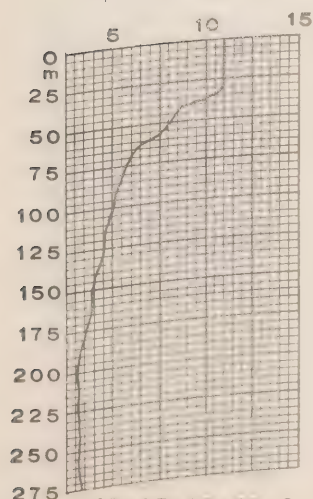
65-07-19-00.0
49°48'n
145°08'w



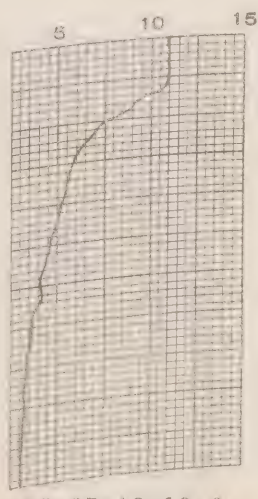
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49°58'n
145°11'w



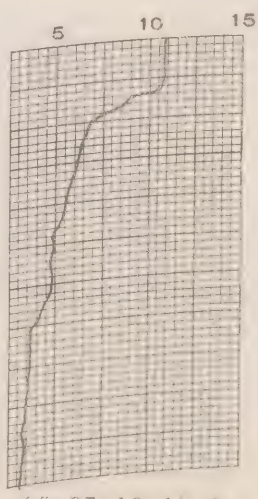
65-07-19-06.0
50°02'n
144°59'w



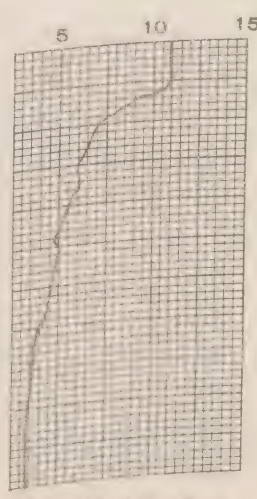
65-07-19-09.0
50°02'n
145°04'w



65-07-19-12.0
50°01'n
145°13'w

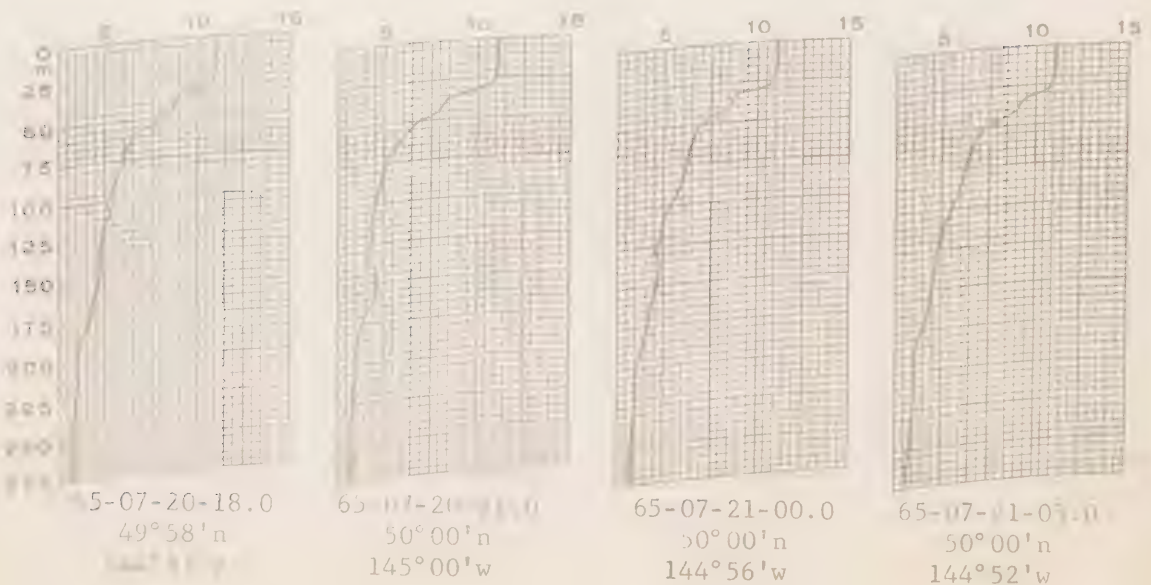
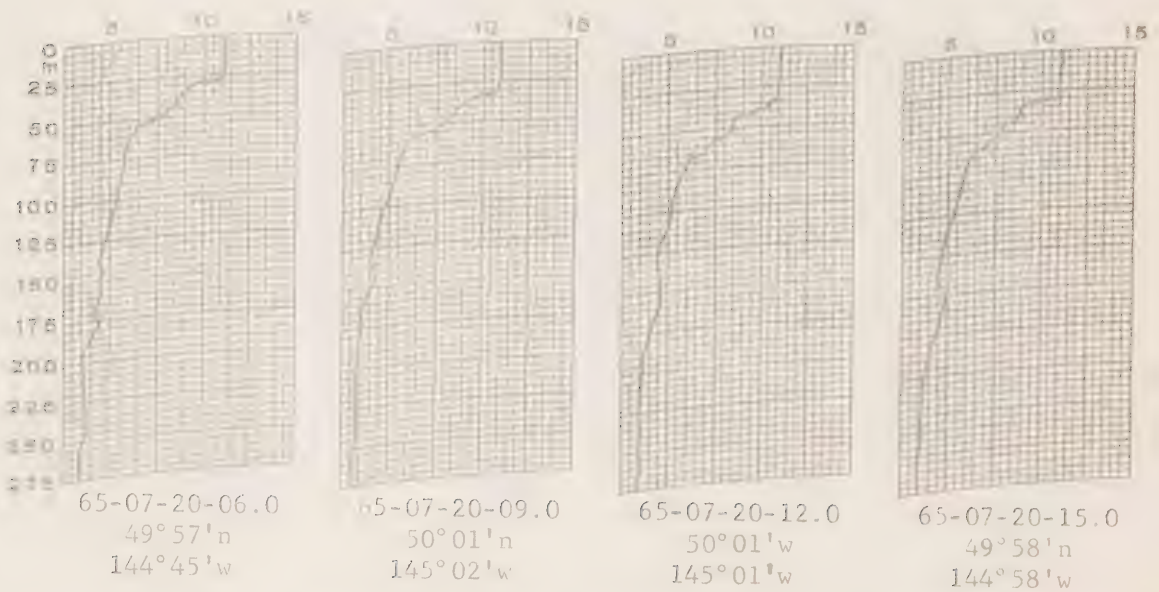
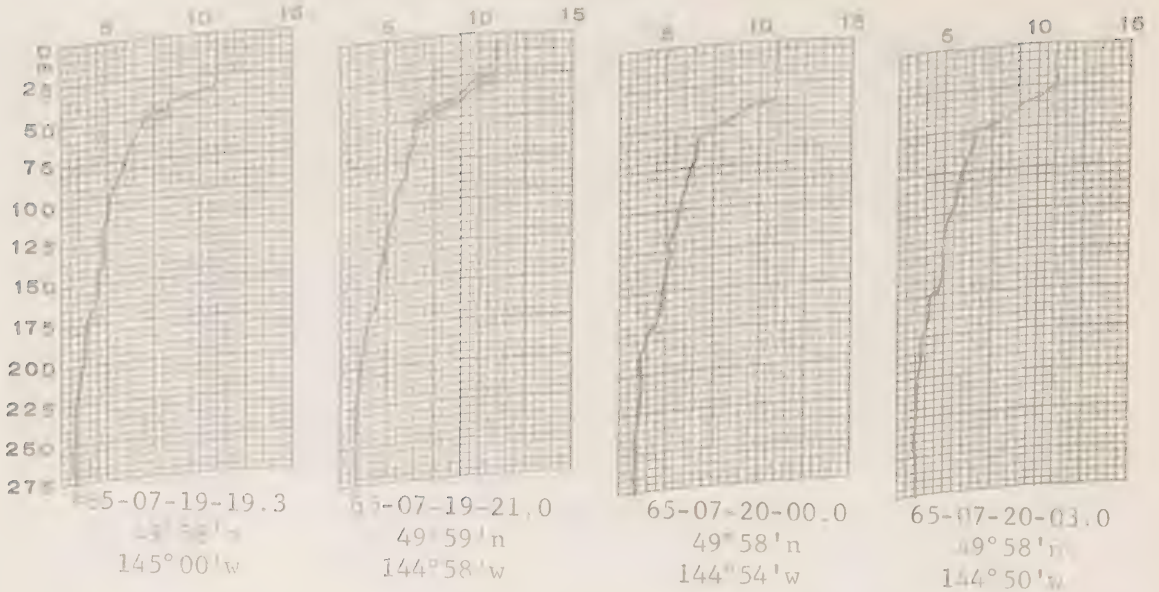


65-07-19-15.0
49°57'n
144°53'w

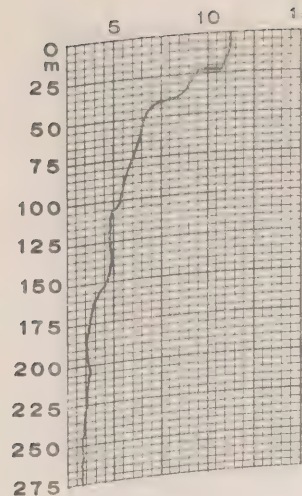


65-07-19-18.0
49°59'n
144°55'w

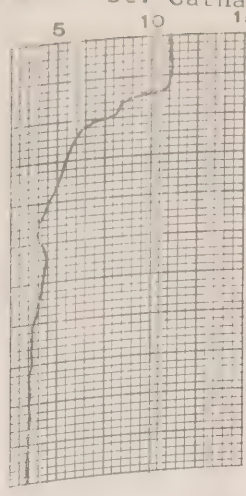
C.C.G.S. "St. Catharines", Survey P-65-3



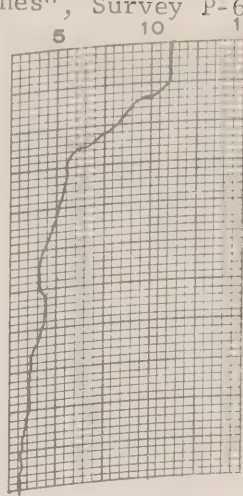
C.C.C.S. "St. Catharines", Survey P-65-3



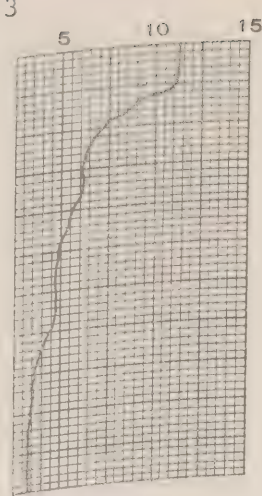
65-07-21-06.0
50°00'n
144°48'w



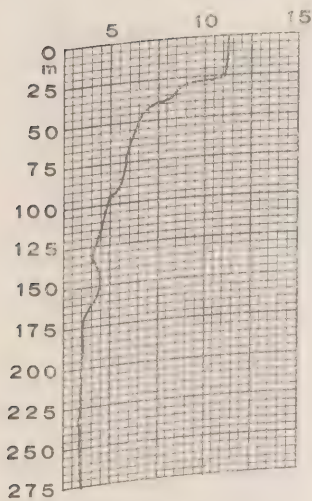
65-07-21-09.0
50°01'n
145°00'w



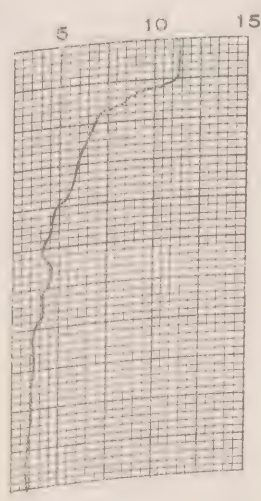
65-07-21-12.0
50°03'n
144°54'w



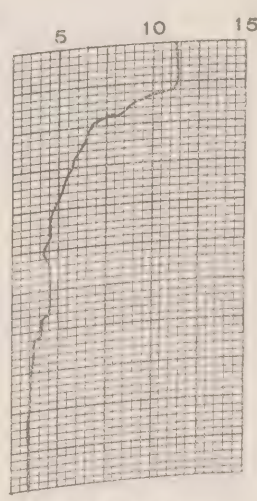
65-07-21-15.0
49°55'n
144°59'w



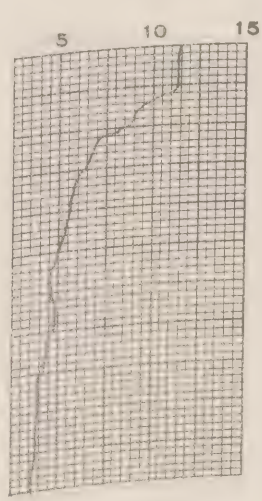
65-07-21-18.0
49°59'n
145°00'w



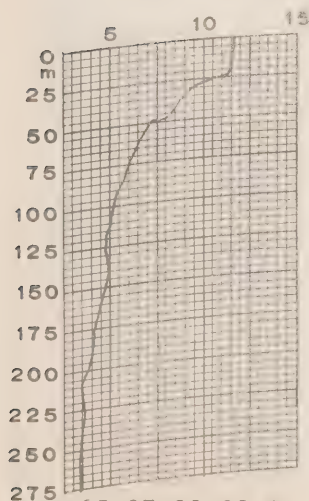
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49°58'n
144°58'w



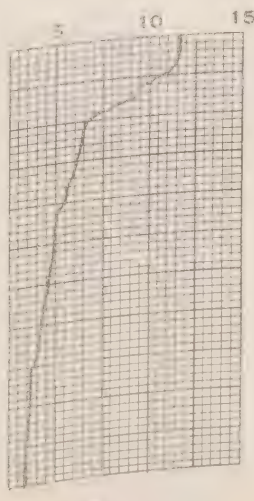
65-07-21-21.0
50°00'n
144°57'w



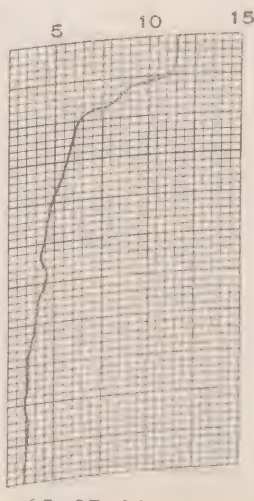
65-07-22-00.0
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144°56'w



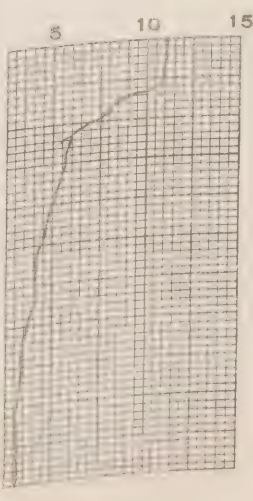
65-07-22-03.0
49°48'n
144°50'w



65-07-22-06.0
50°01'n
144°46'w

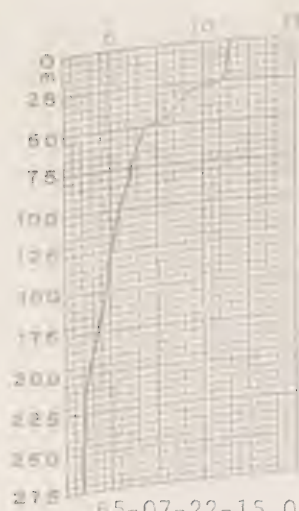


65-07-22-09.0
50°02'n
145°00'w



65-07-22-12.0
50°07'n
145°00'w

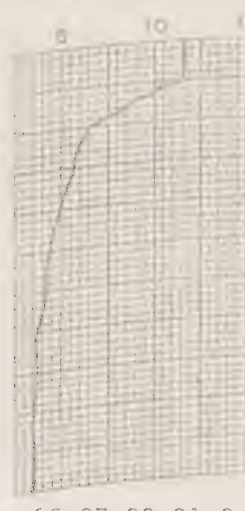
C.C.G.S. "St. Catharines" Survey P-65-3



65-07-22-15.0
49°58'N
144°58'W



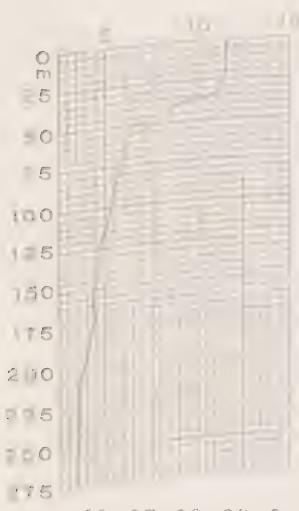
65-07-22-18.0
49°58'N
144°54'W



65-07-22-21.0
50°01'N
145°00'W



65-07-23-00.0
50°03'N
144°54'W



65-07-23-03.0
50°03'N
144°58'W



65-07-23-06.0
50°00'N
145°00'W



65-07-23-09.0
50°06'N
144°52'W



65-07-23-12.0
50°08'N
144°47'W



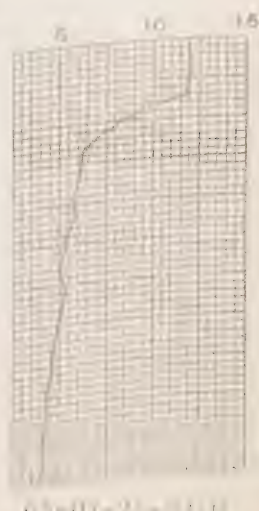
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145°00'W



65-07-23-21.0
49°58'N
145°00'W

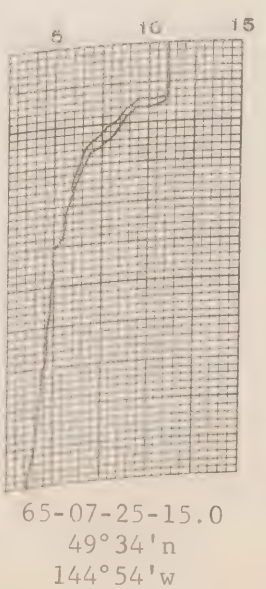
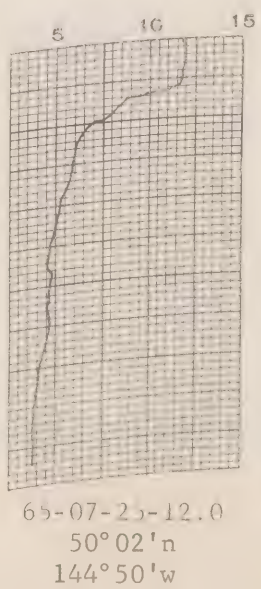
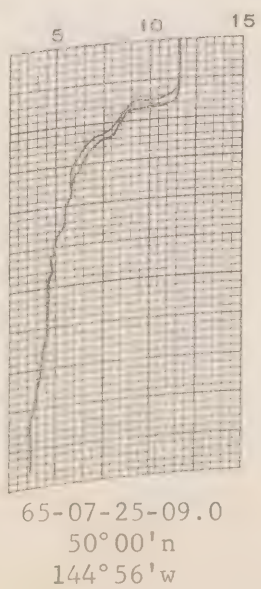
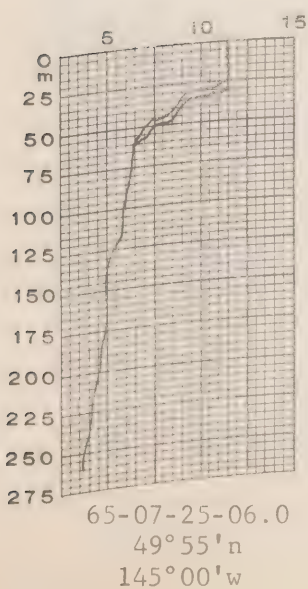
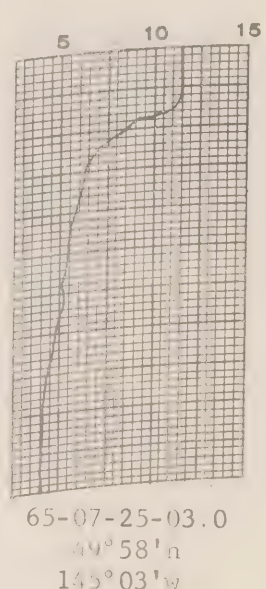
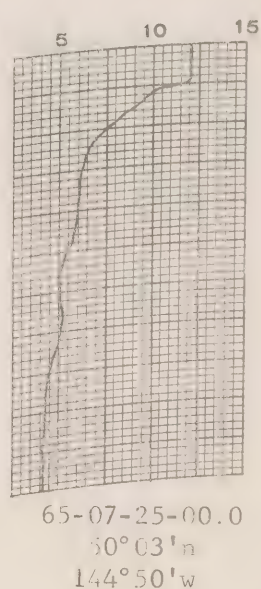
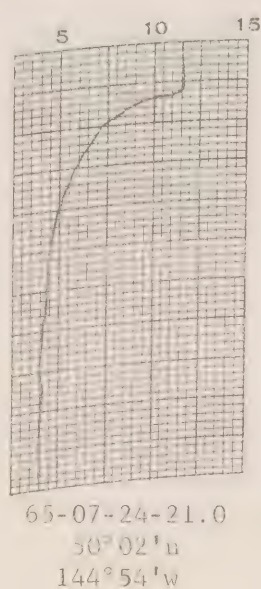
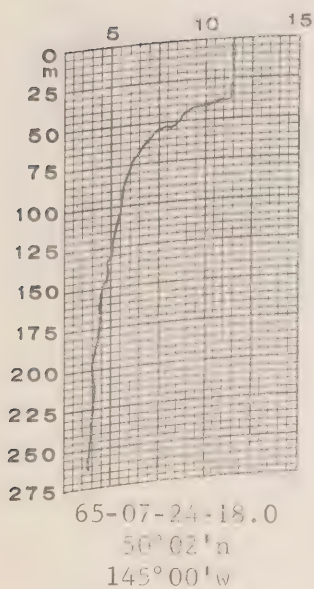
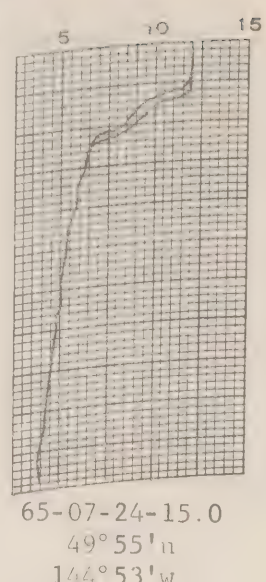
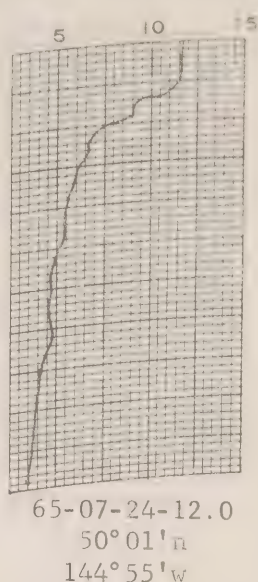
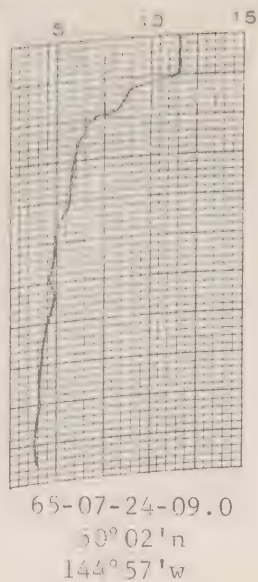
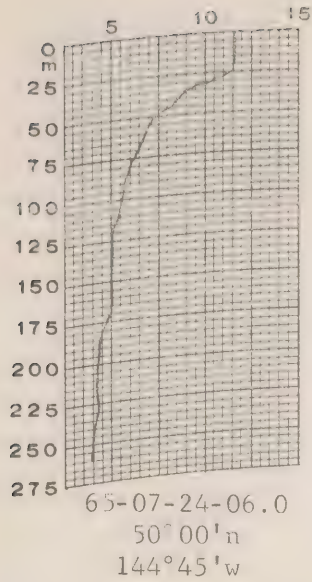


65-07-24-00.0
49°58'N
144°56'W

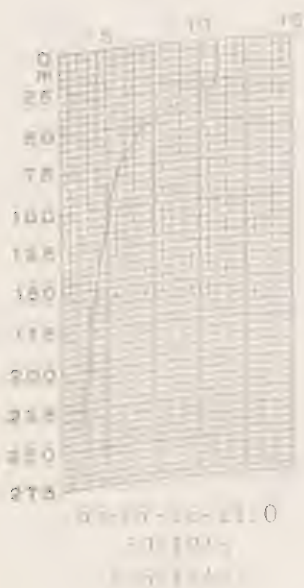
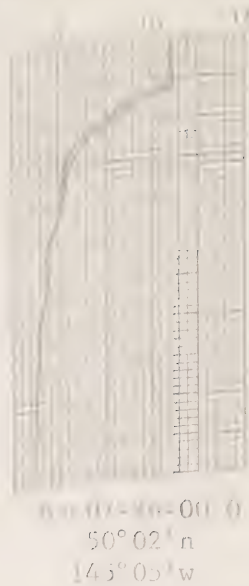


65-07-24-03.0
49°58'N
144°52'W

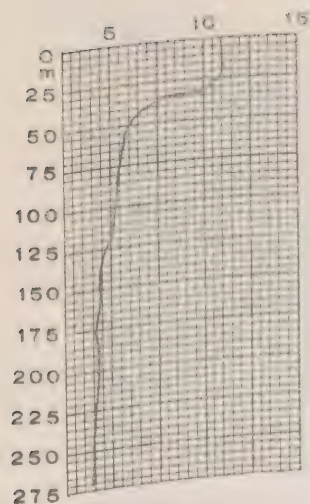
C.C.S. "St. Catharines", Survey P-65-3



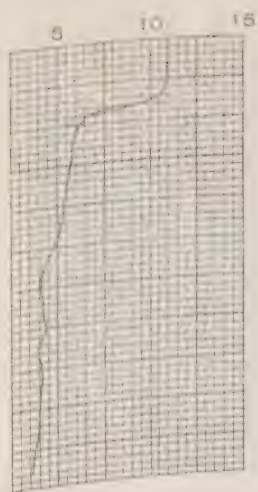
St. Catharines", Survey P-65-3



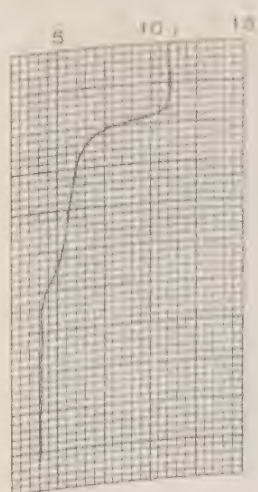
C.C.G.S. "St. Catharines", Survey P-65-3



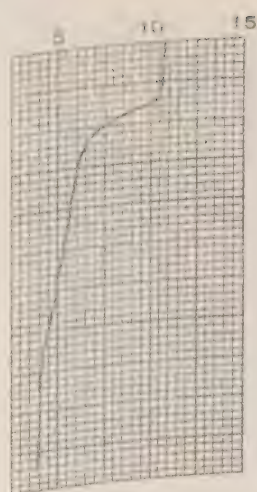
65-07-28-00.0
50°02'N
145°08'W



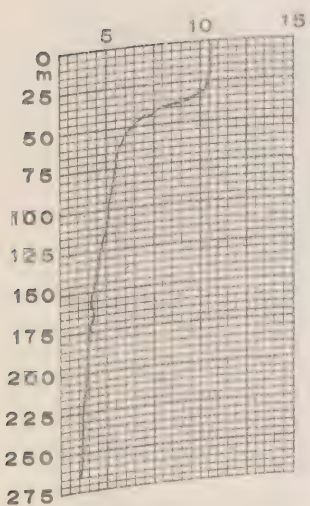
65-07-28-03.0
50°02'N
145°05'W



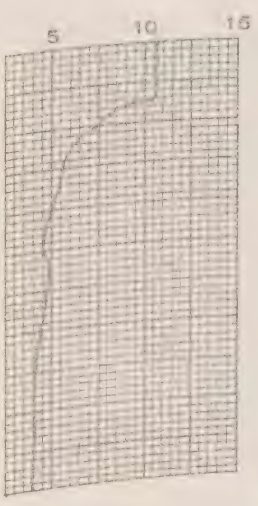
65-07-28-06.0
50°07'N
145°06'W



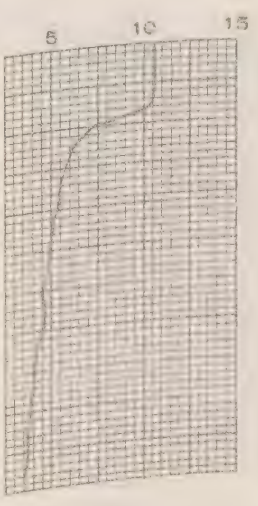
65-07-28-09.0
50°03'N
144°59'W



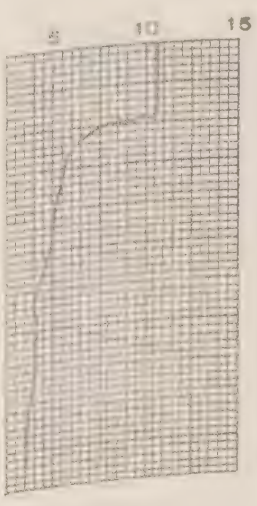
65-07-28-12.0
50°07'N
145°02'W



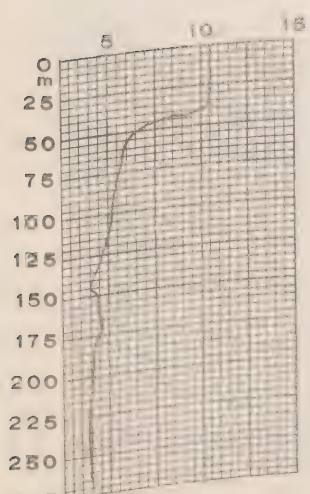
65-07-28-15.0
49°58'N
144°59'W



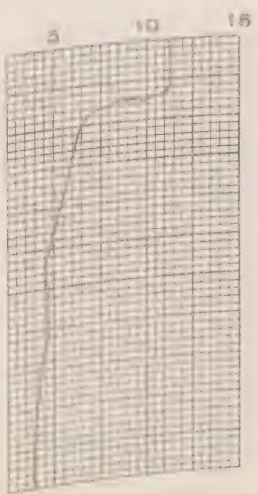
65-07-28-18.0
50°00'N
145°01'W



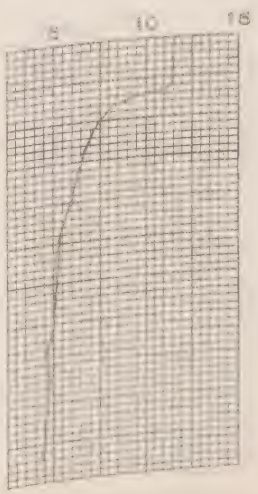
65-07-28-21.0
50°03'N
145°10'W



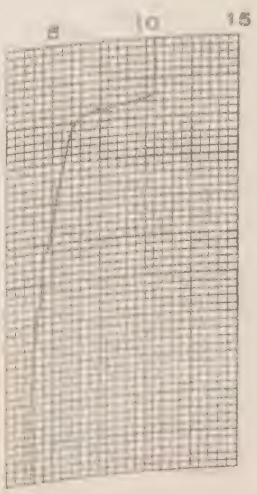
65-07-29-00.0
50°02'N
145°02'W



65-07-29-03.0
49°55'N
144°53'W

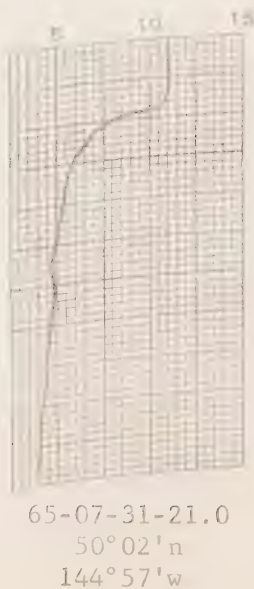
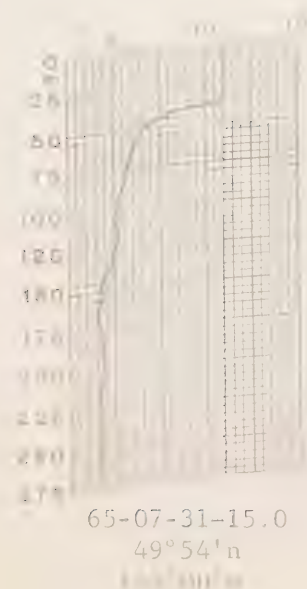
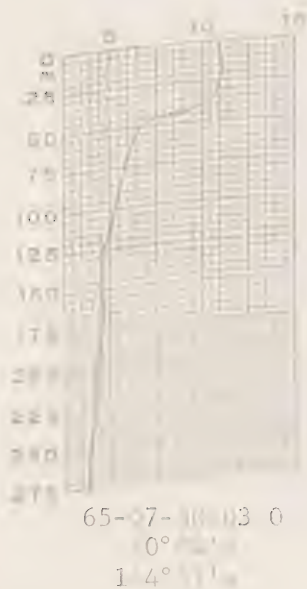
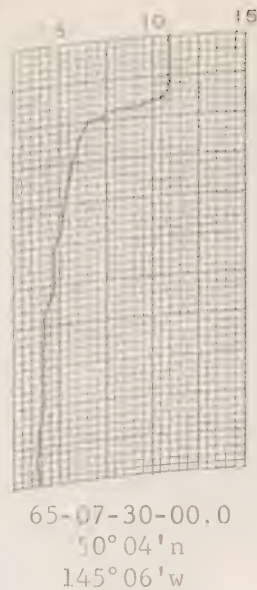
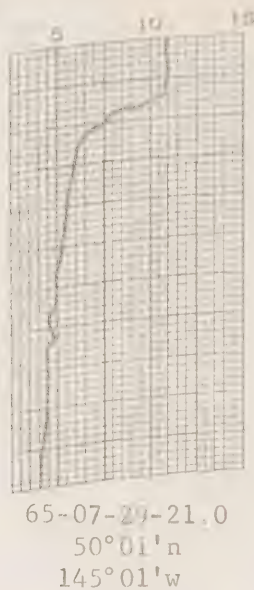
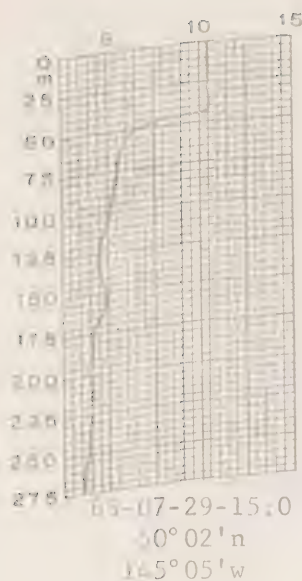


65-07-29-06.0
49°58'N
144°47'W

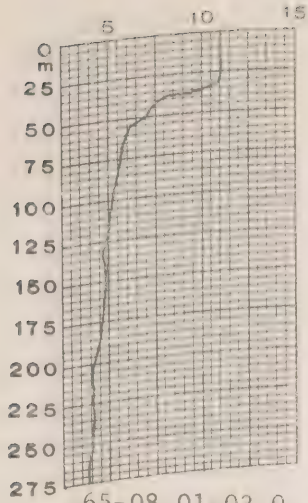


65-07-29-12.0
50°02'N
145°08'W

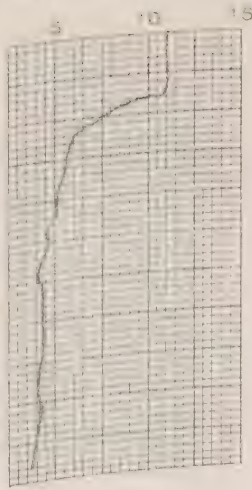
12.0.0 5. "St. Catharines", Survey P-65-3



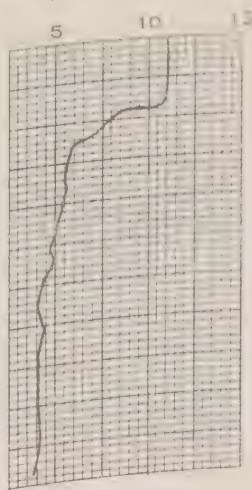
C.C.6.5. "St. Catharines", Survey P-65-3



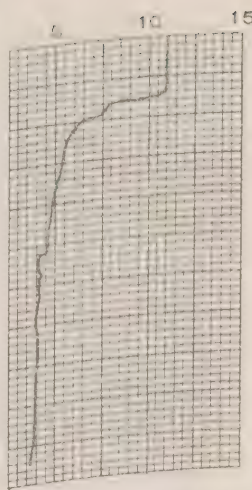
65-08-01-03.0
50°04'n
144°56'w



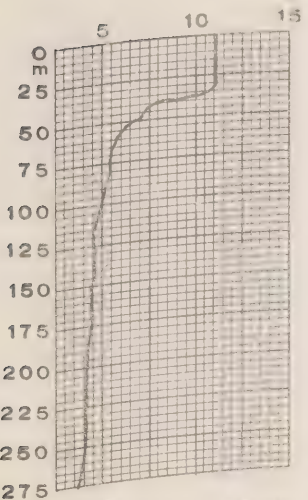
65-08-01-06.0
50°00'n
145°00'w



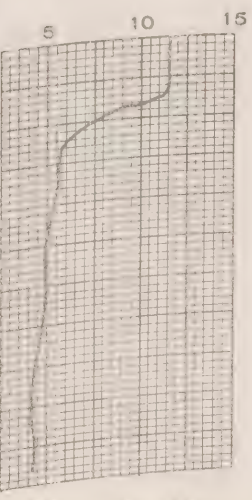
65-08-01-09.0
50°03'n
144°55'w



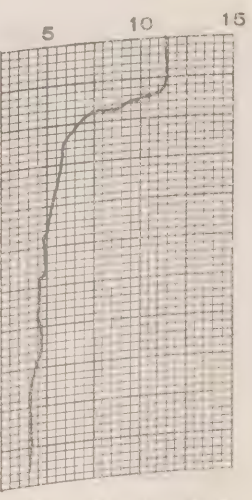
65-08-01-12.0
50°05'n
144°54'w



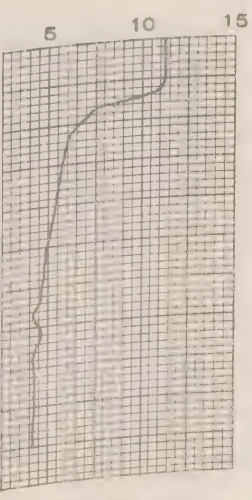
65-08-01-15.0
50°04'n
144°54'w



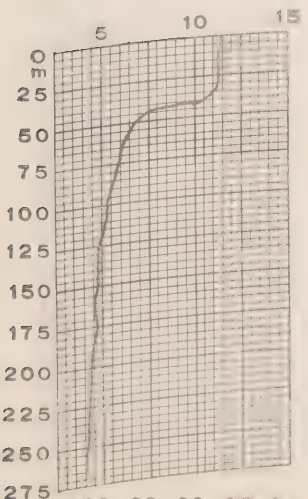
65-08-01-18.0
50°03'n
144°54'w



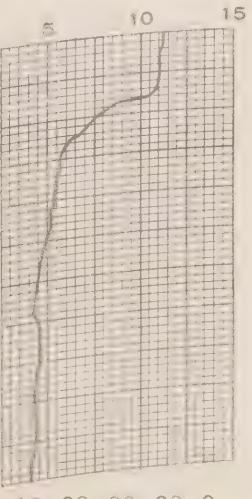
*65-08-01-19.2
50°04'n
144°55'w



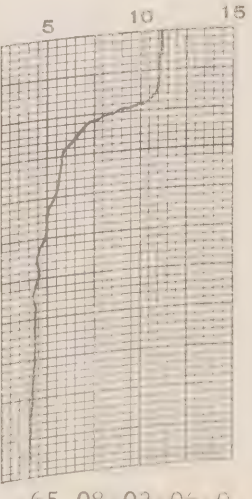
65-08-01-21.0
50°06'n
144°50'w



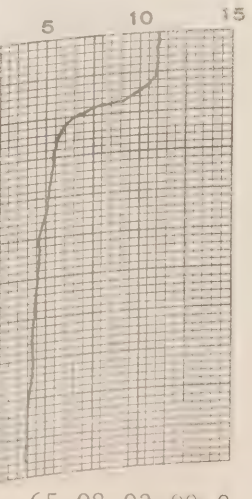
65-08-02-00.0
50°08'n
144°49'w



65-08-02-03.0
50°02'n
144°58'w

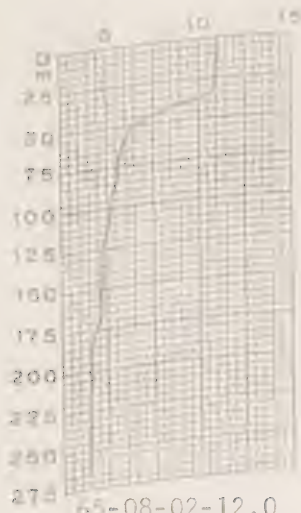


65-08-02-06.0
50°05'n
144°58'w

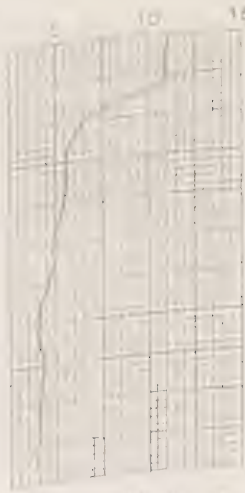


65-08-02-09.0
50°07'n
144°56'w

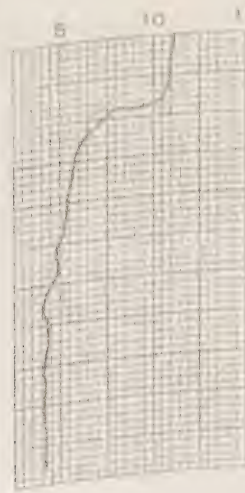
C.C.G.S. "St. Catharines", Survey P-65-3



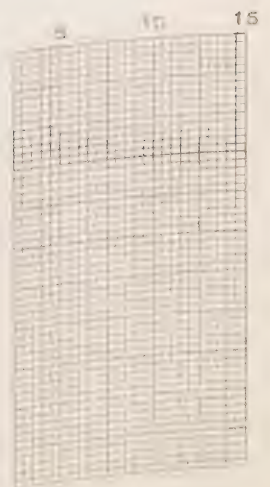
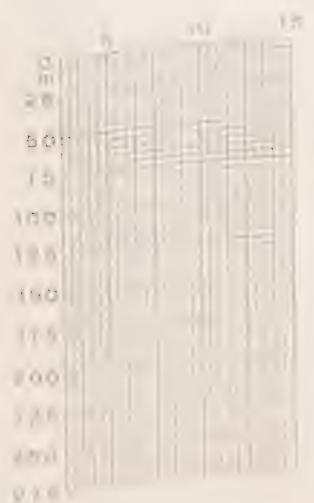
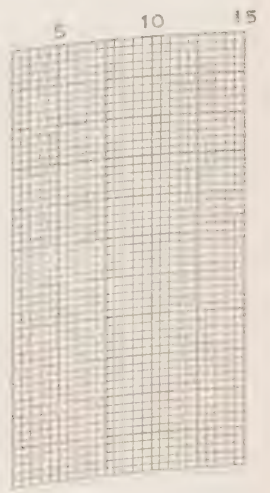
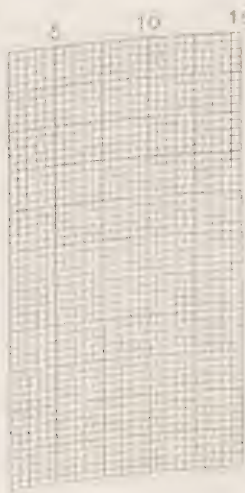
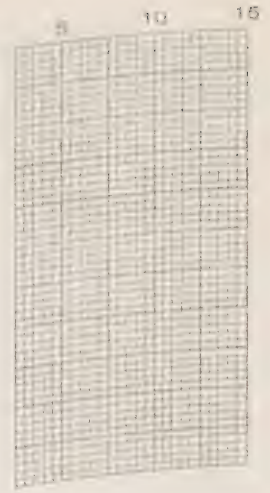
65-08-02-12.0
50°09'N
144°52'W



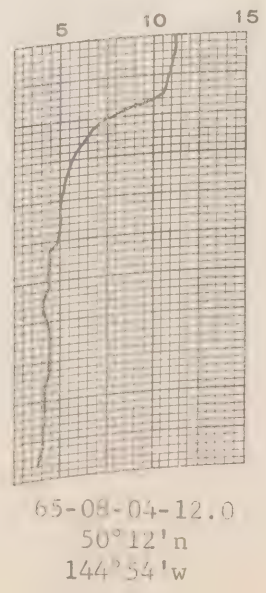
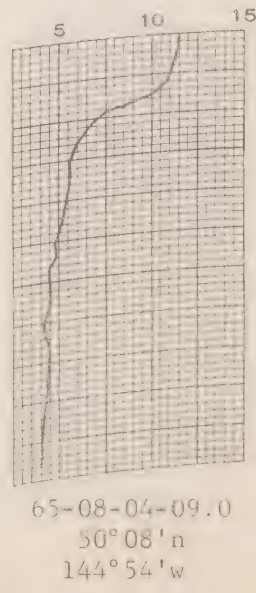
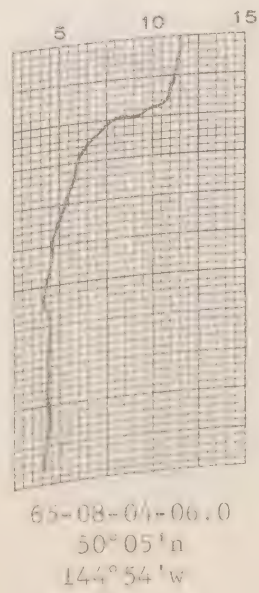
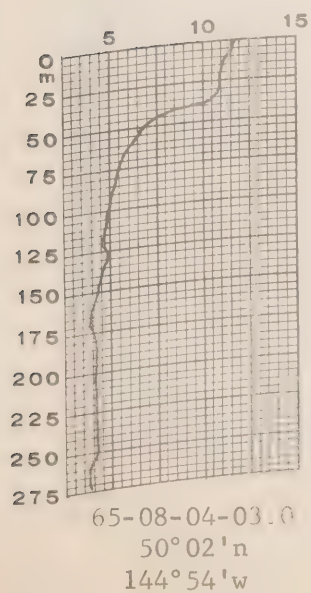
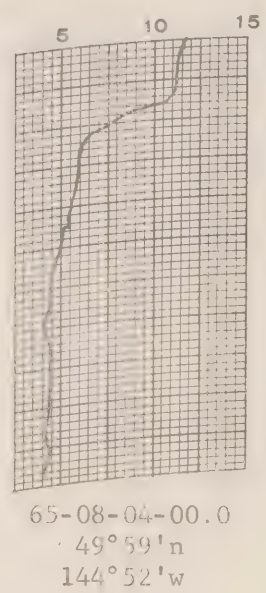
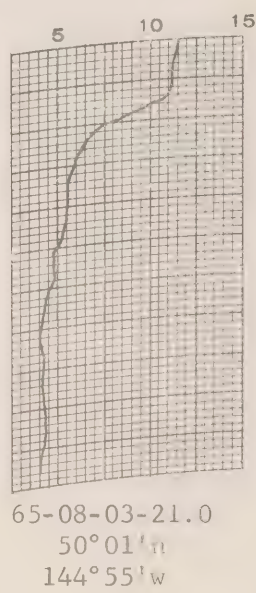
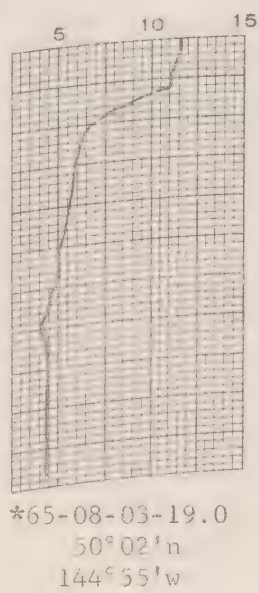
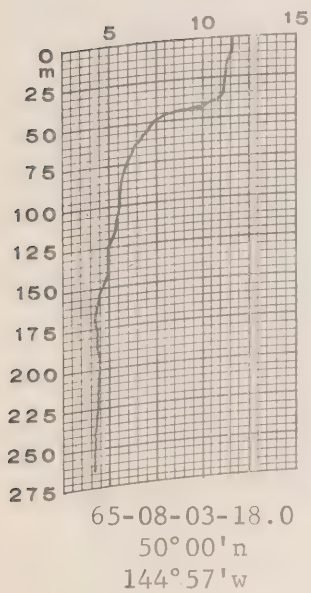
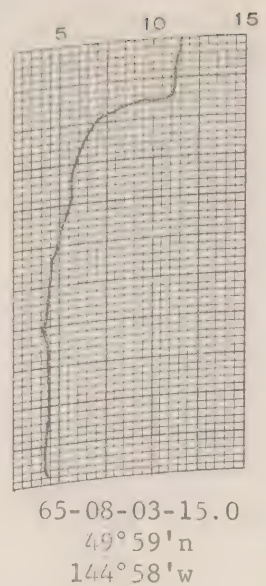
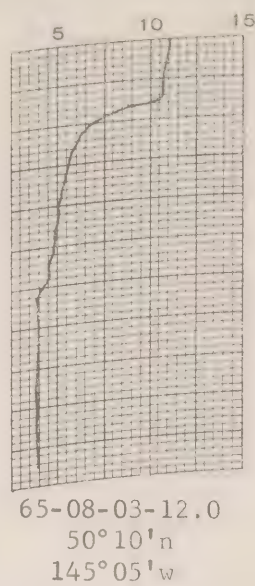
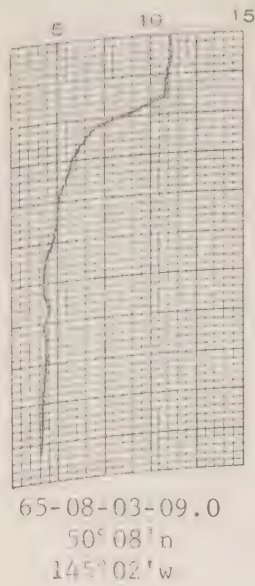
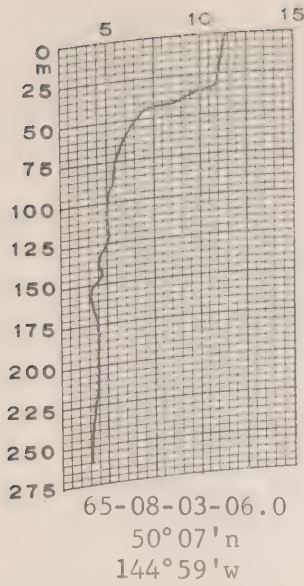
65-08-02-15.0
50°00'N
145°00'W



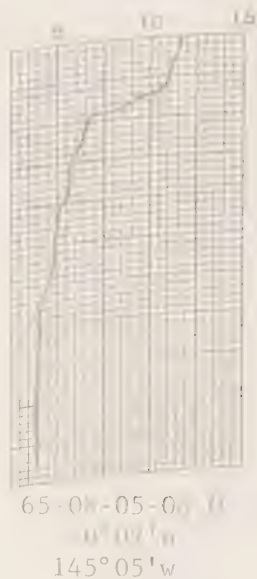
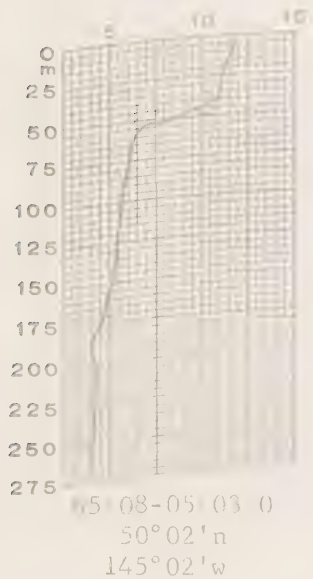
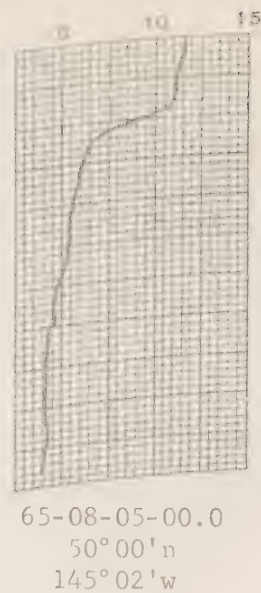
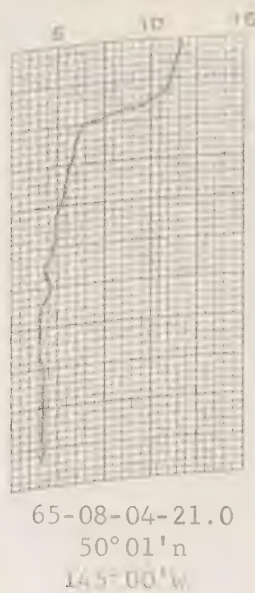
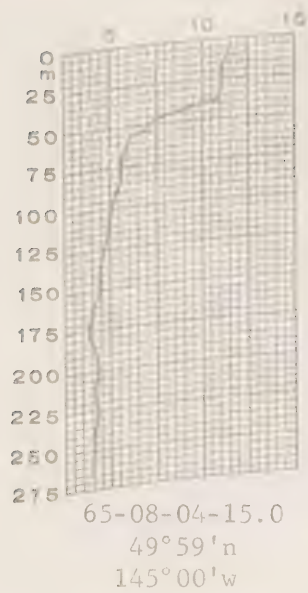
65-08-02-18.0
50°00'N
145°00'W



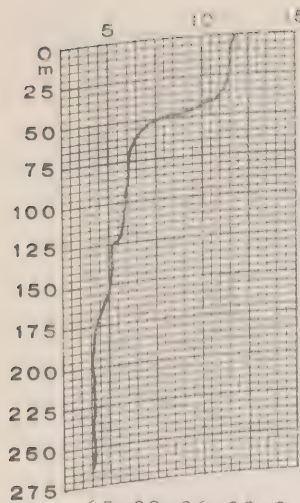
C.C.G.S. "St. Catharines", Survey P-65-3



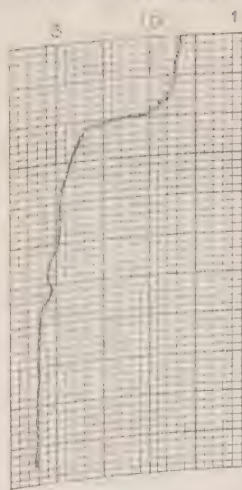
C.O.-2-5 "St. Catharines", Survey P-65-3



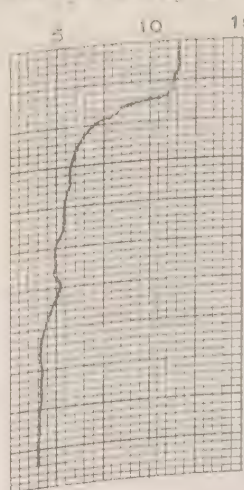
C.C.C.S. "SS. Catharines". Survey P-65-3



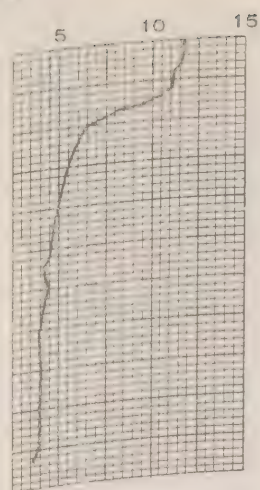
65-08-06-00.0
50°02'n
145°02'w



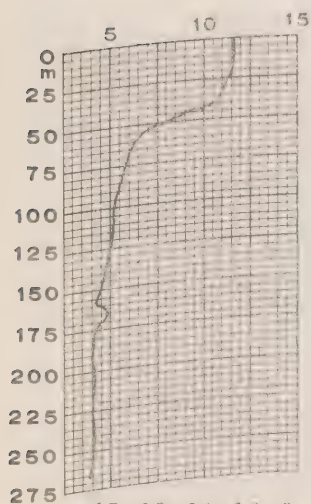
65-08-06-03.0
50°01'n
145°08'w



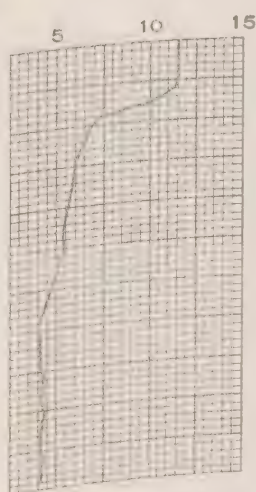
65-08-06-06.0
50°00'n
145°13'w



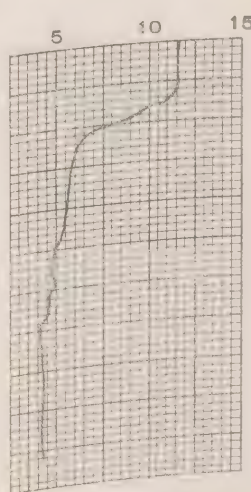
65-08-06-09.0
50°01'n
145°00'w



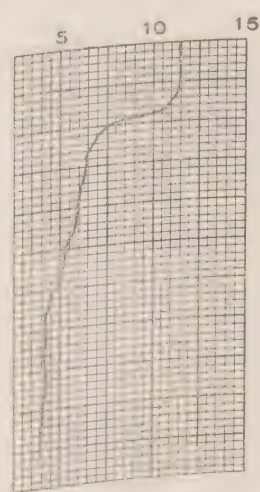
65-08-06-12.0
50°01'n
145°01'w



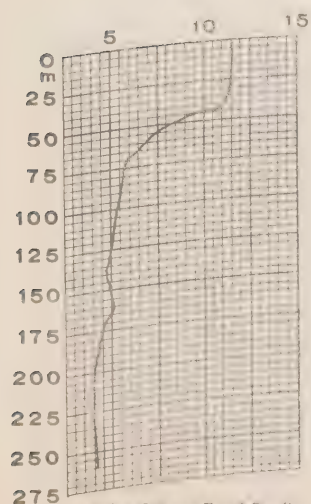
65-08-06-15.0
49°55'n
145°05'w



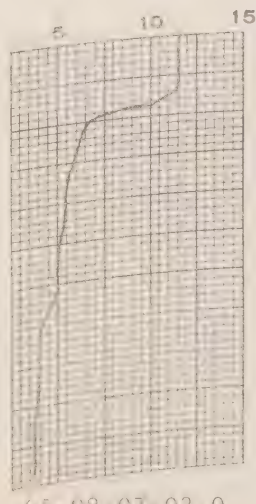
65-08-06-18.0
50°00'n
145°04'w



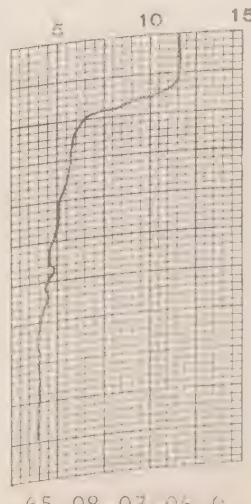
65-08-06-21.0
49°57'n
145°12'w



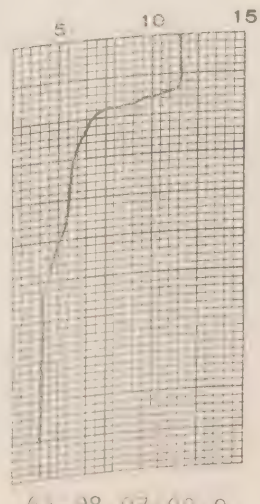
65-08-07-00.0
49°57'n
145°15'w



65-08-07-03.0
50°00'n
145°05'w

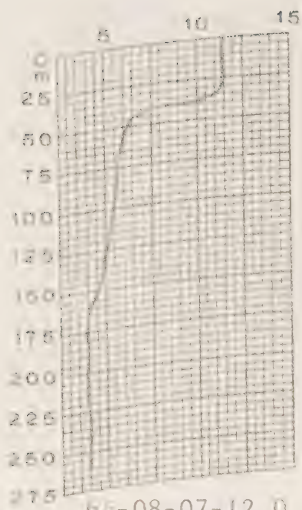


65-08-07-06.0
50°02'n
145°03'w

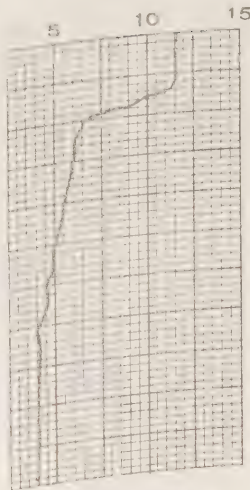


65-08-07-09.0
49°59'n
145°07'w

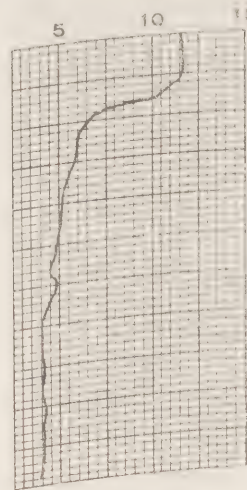
C.C.G.S. "St Catharines", Survey P-65-3



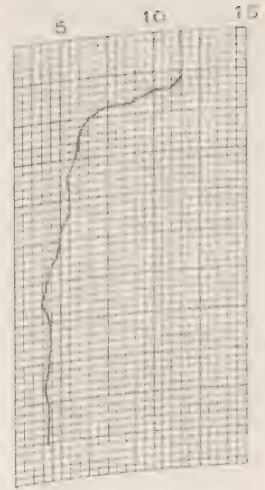
65-08-07-12.0
49°58'N
145°10'W



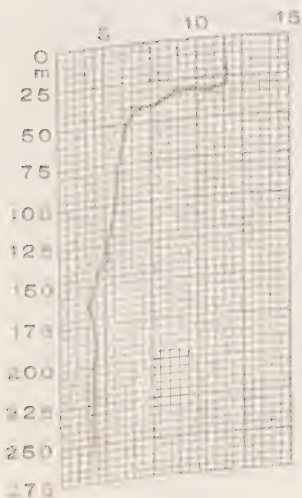
65-08-07-15.0
49°58'N
145°03'W



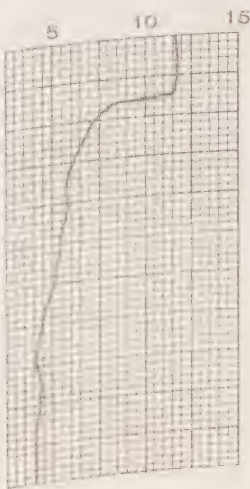
65-08-07-18.0
50°01'N
145°03'W



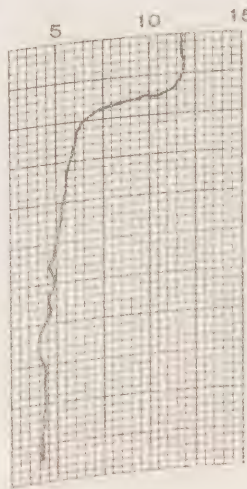
65-08-07-21.0
49°56'N
145°03'W



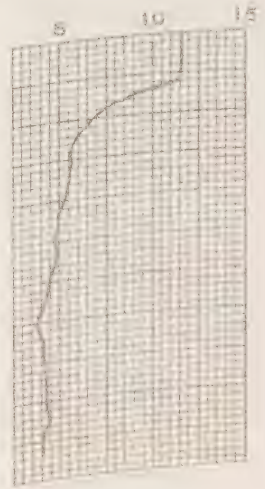
65-08-08-00.0
49°54'N
145°03'W



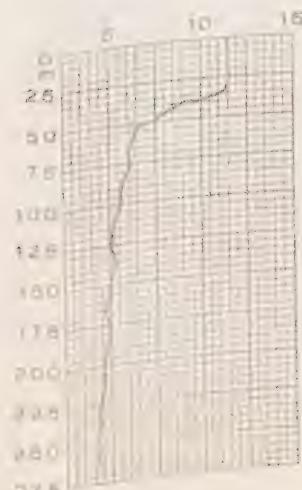
65-08-08-03.0
50°00'N
145°07'W



65-08-08-06.0
50°04'N
145°02'W



65-08-08-09.0
50°02'N
144°59'W



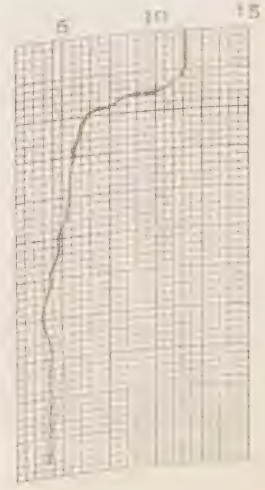
65-08-08-12.0
50°03'N
144°56'W



65-08-08-15.0
49°51'N
144°56'W

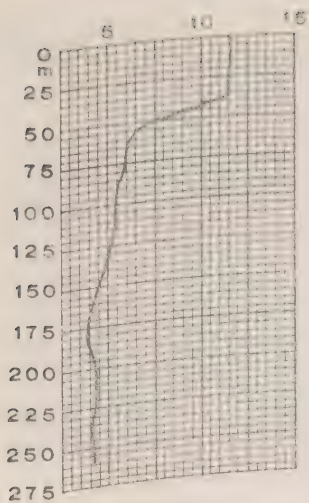


65-08-08-18.0
50°01'N
144°56'W

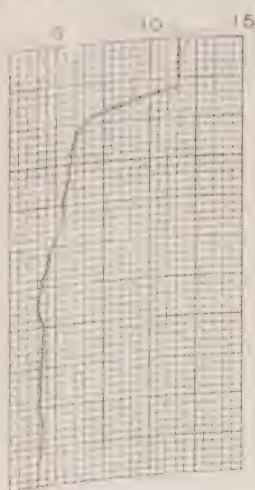


*65-08-08-19.0
49°59'N
144°56'W

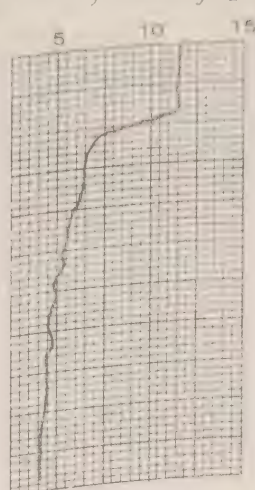
C.C.G.S. "St. Catharines", Survey P-65-3



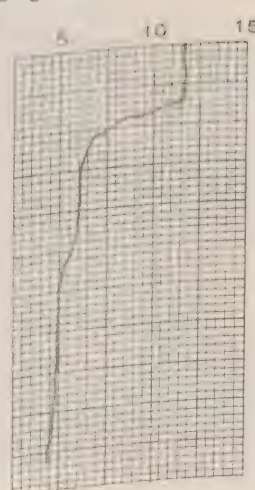
65-08-08-21.0
50°00'n
145°00'w



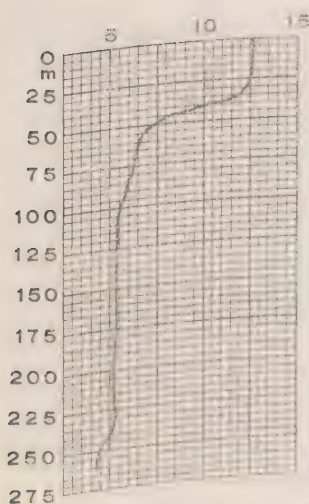
65-08-09-00.0
50°00'n
143°00'w



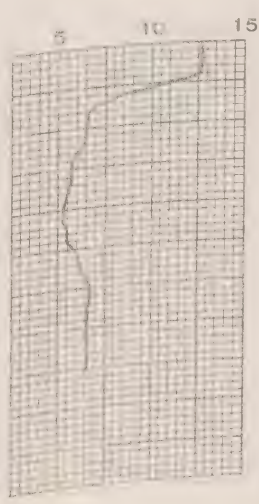
65-08-09-05.0
49°58'n
143°54'w



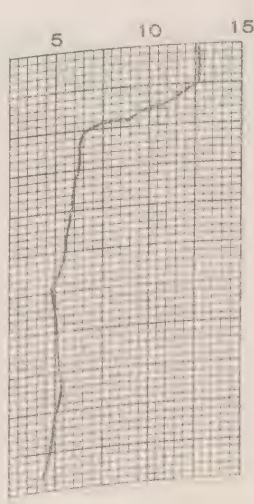
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49°49'n
143°15'w



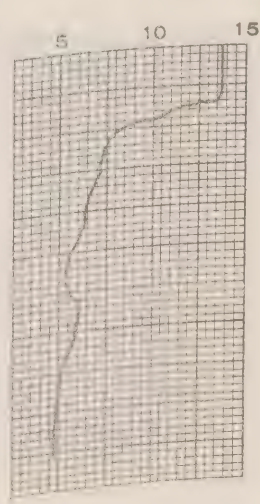
*65-08-09-21.0
49°42'n
140°41'w



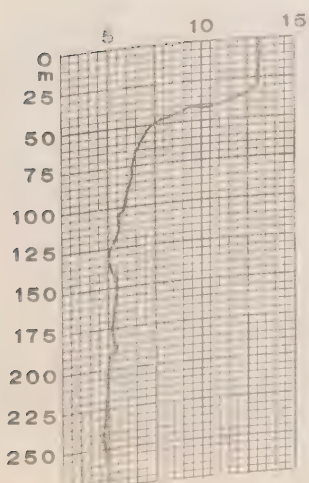
65-08-10-01.3
49°37'n
139°40'w



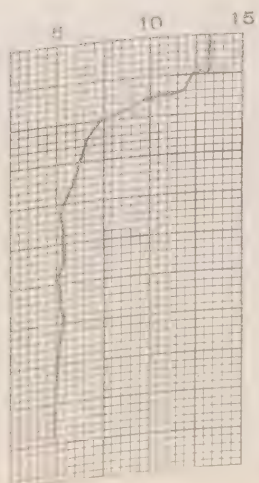
*65-08-10-04.3
49°34'n
138°40'w



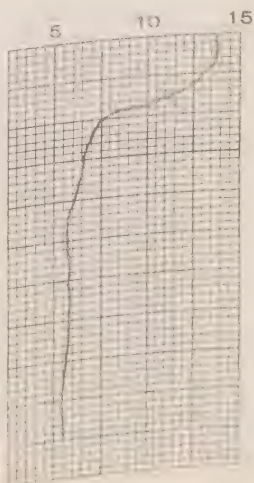
65-08-10-08.0
49°30'n
137°40'w



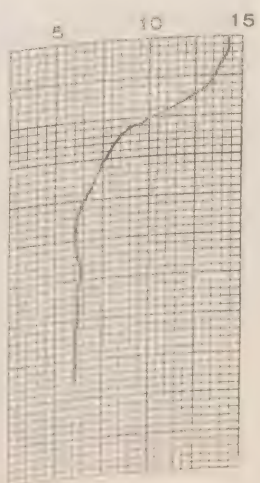
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49°26'n
136°40'w



65-08-10-15.0
49°23'n
135°40'w

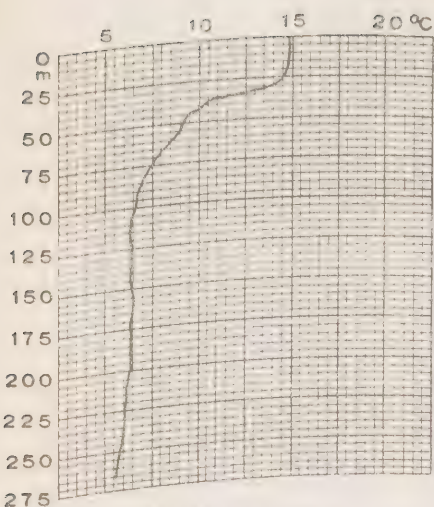


*65-08-10-17.9
49°19'n
134°40'w

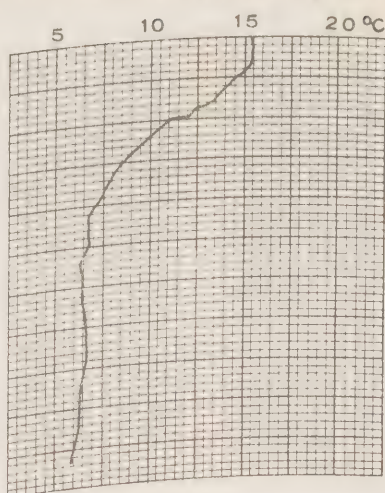


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49°14'n
133°40'w

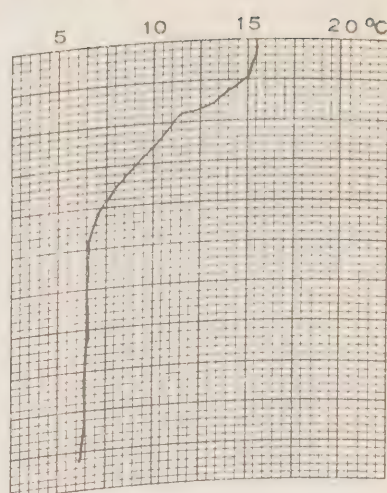
C.C.G.S. "St. Catharines", Survey P-65-3



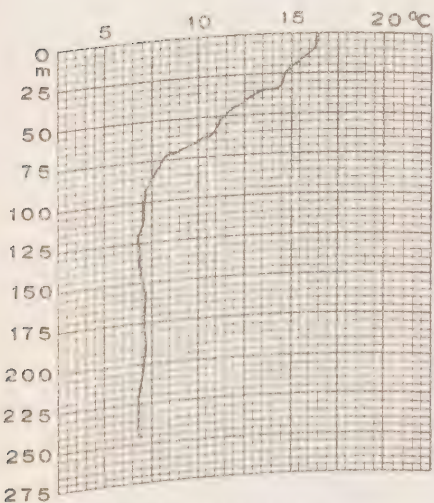
*65-08-11-00.7
49°10'n
132°48'w



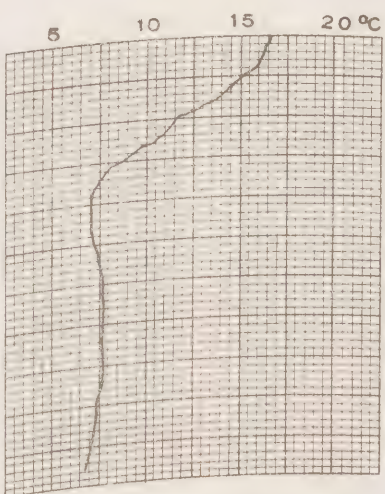
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49°05'n
131°40'w



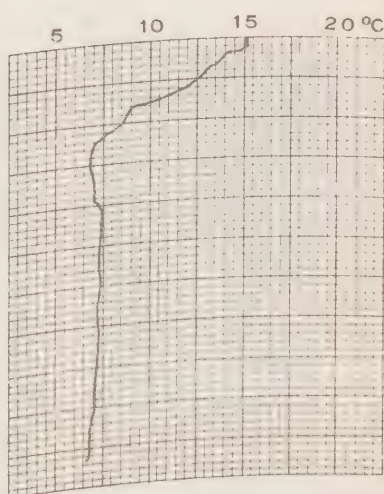
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49°02'n
130°40'w



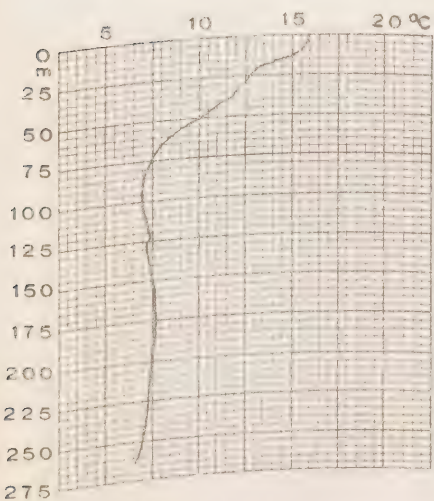
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48°55'n
129°40'w



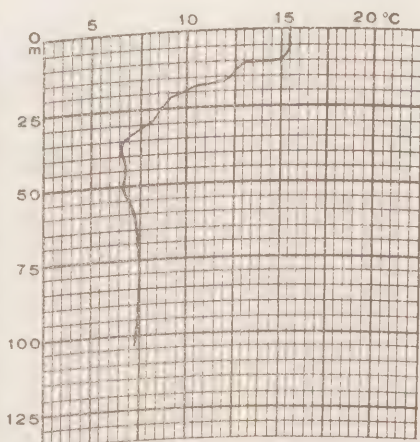
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48°51'n
128°40'w



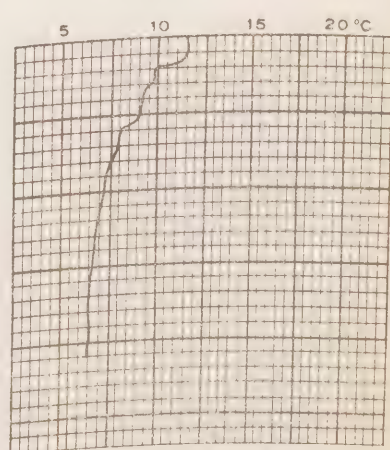
*65-08-11-17.3
48°47'n
127°40'w



*65-08-11-22.1
48°42'n
126°40'w

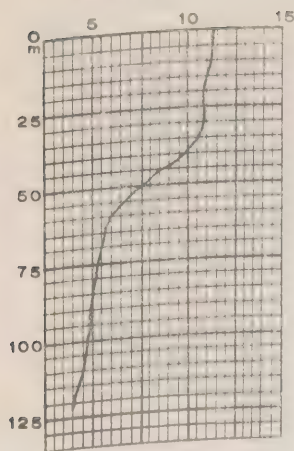


*65-08-12-01.1
48°38'n
126°00'w

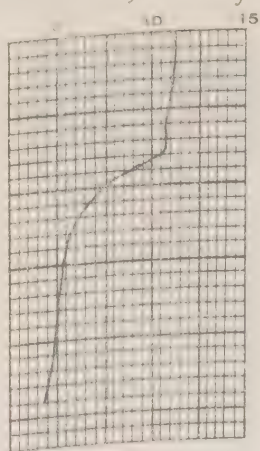


*65-08-12-03.0
48°33'n
125°33'w

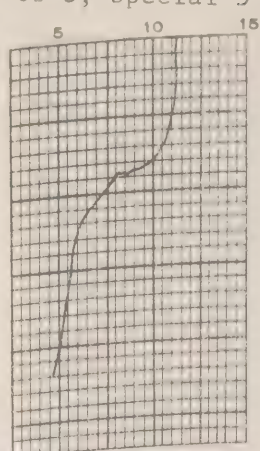
C.C.G.S. "St. Catharines", Survey P-65-3, special 5-minute series



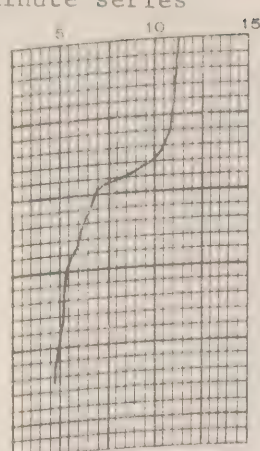
65-08-02-20.30



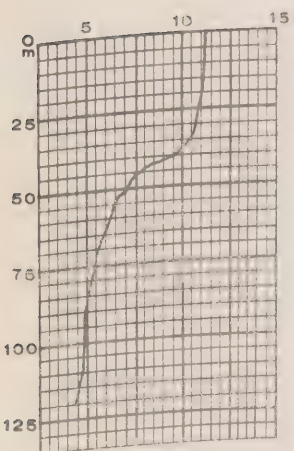
65-08-02-20.35



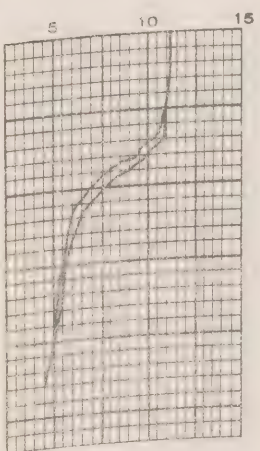
65-08-02-20.40



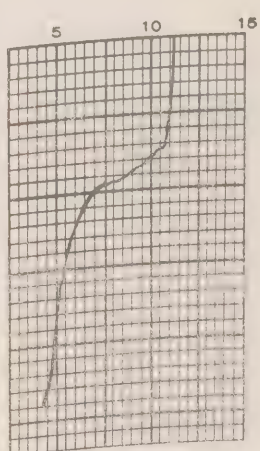
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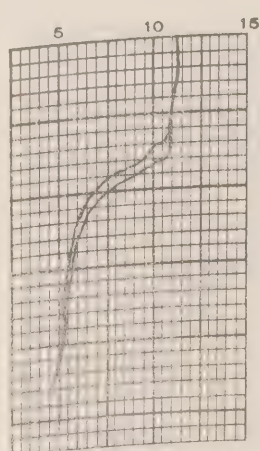
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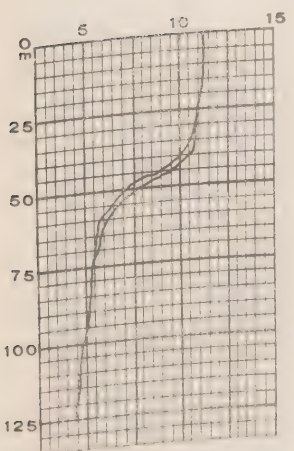
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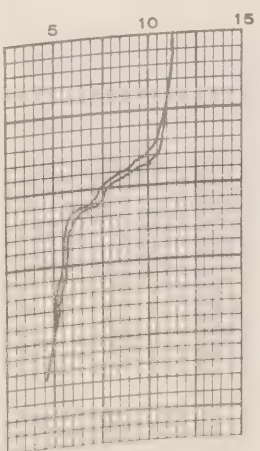
65-08-02-21.00



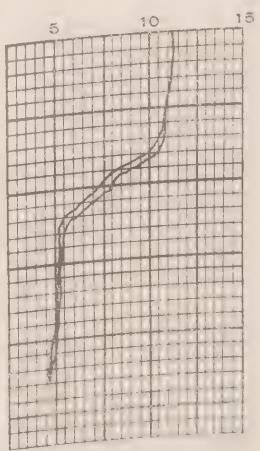
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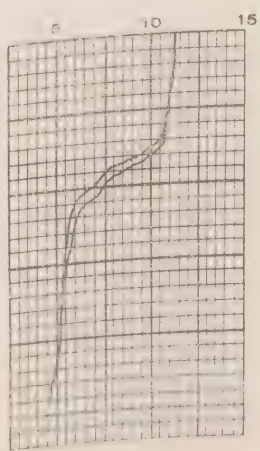
65-08-02-21.10



65-08-02-21.15

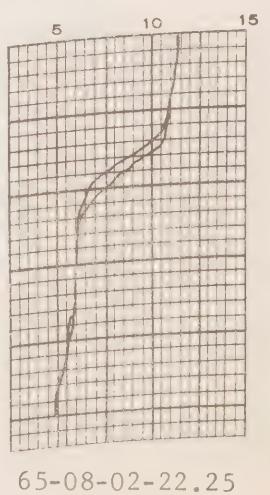
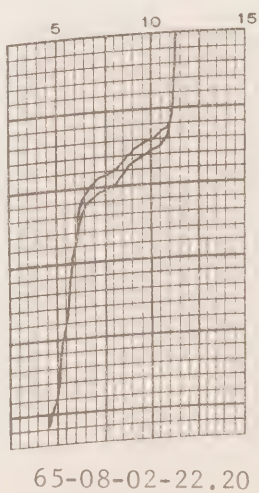
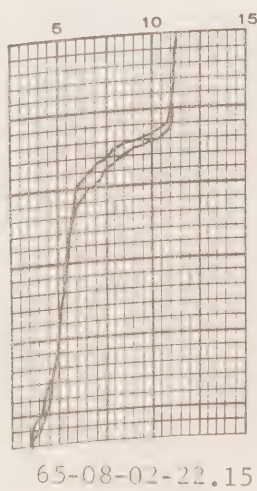
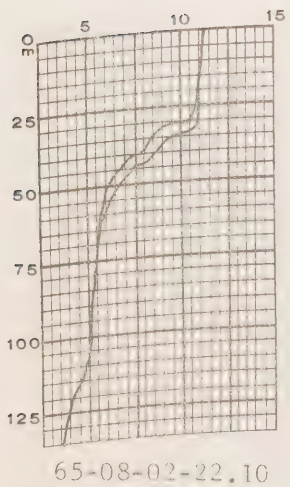
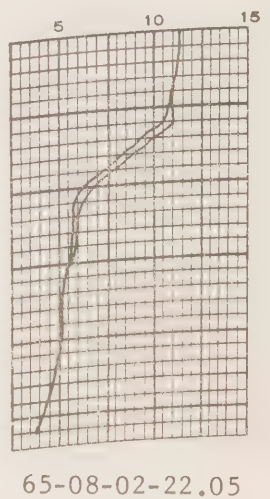
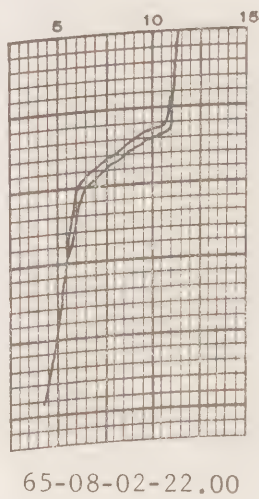
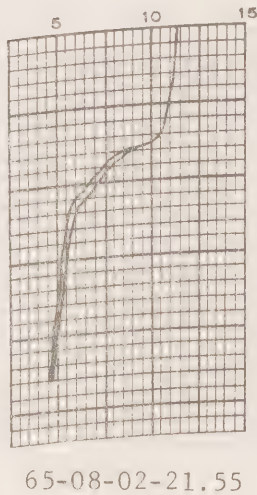
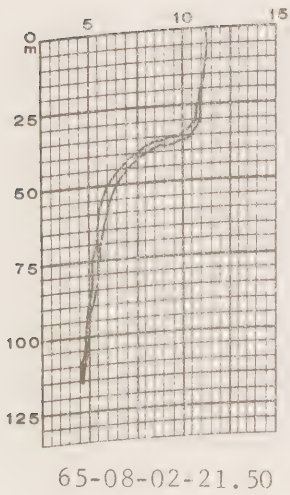
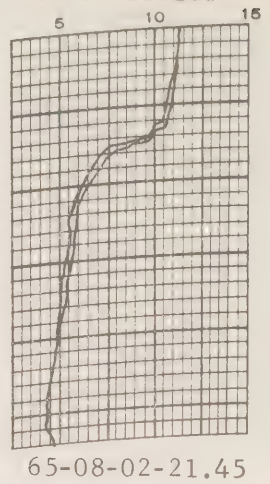
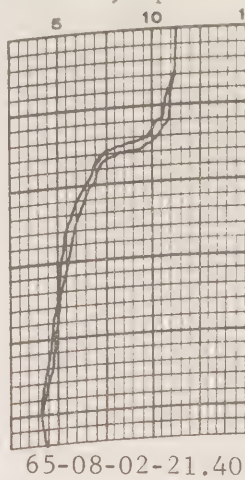
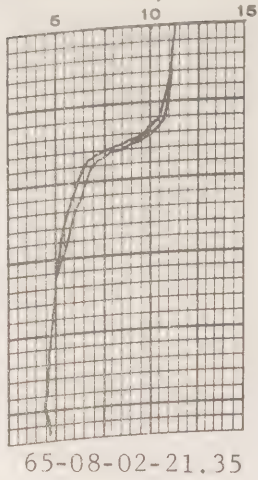
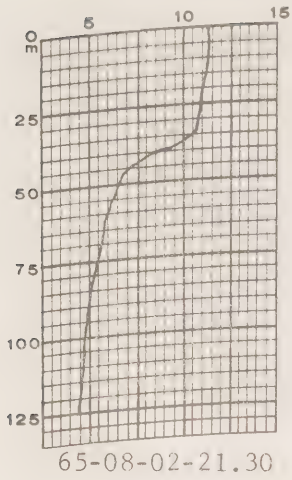


65-08-02-21.20

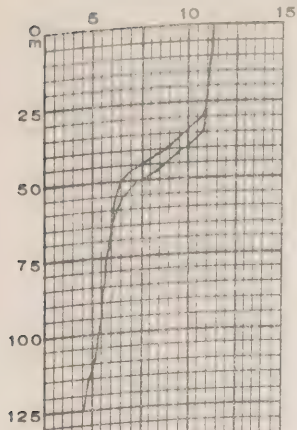


65-08-02-21.25

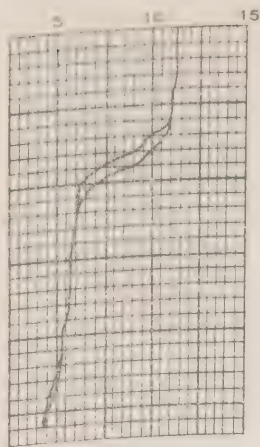
C.C.G.S. "St. Catharines", Survey P-65-3, special 5-minute series



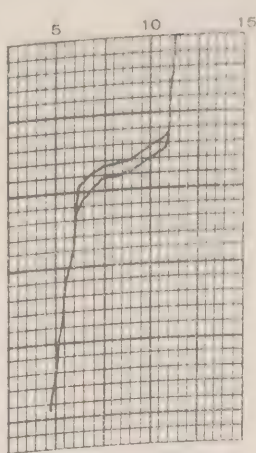
C.C.G.S. "St. Catharines", Survey P-65-3, special 5-minute series



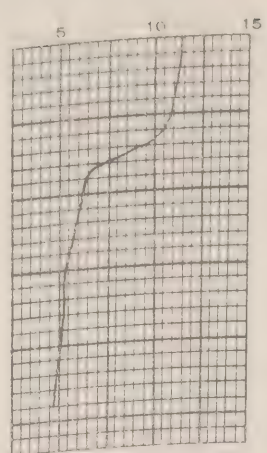
65-08-02-22.30



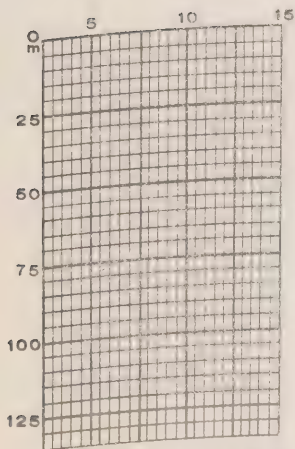
65-08-02-22.35



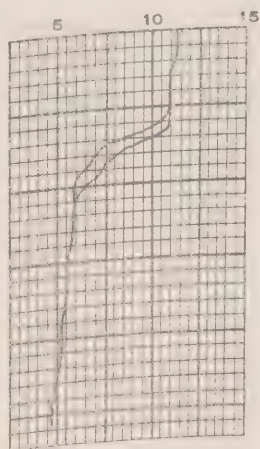
65-08-02-22.40



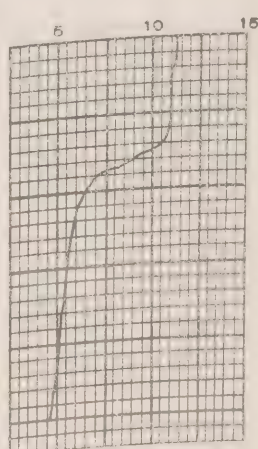
65-08-02-22.45



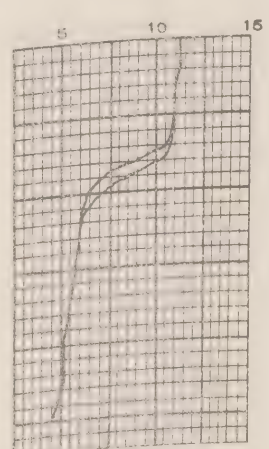
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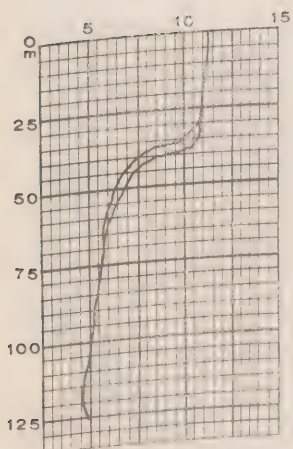
65-08-02-22.55



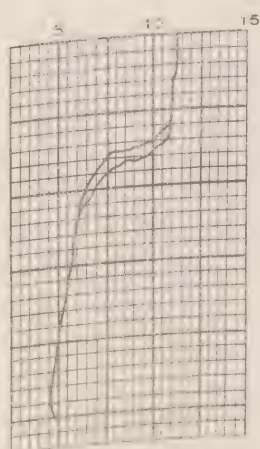
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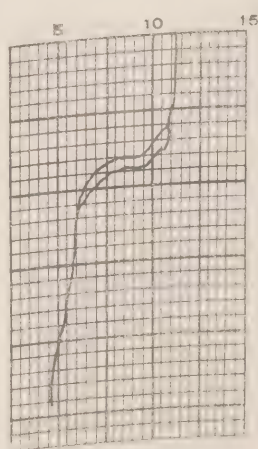
65-08-02-23.05



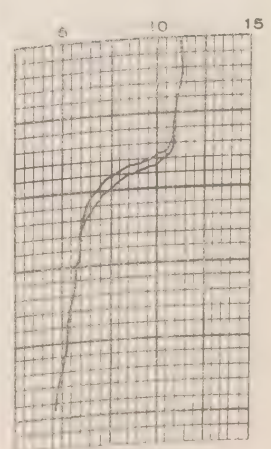
65-08-02-23.10



65-08-02-23.15

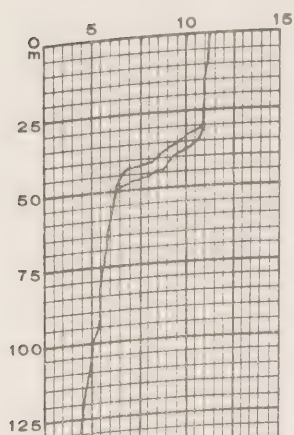


65-08-02-23.20

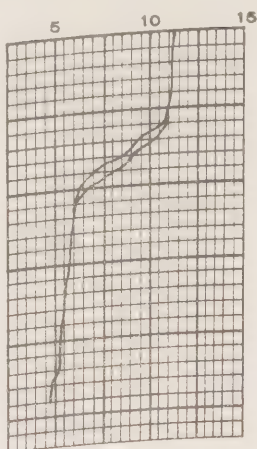


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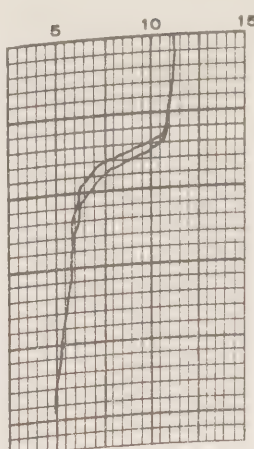
C.C.G.S. "St. Catharines", Survey P-65-3, special 5-minute series



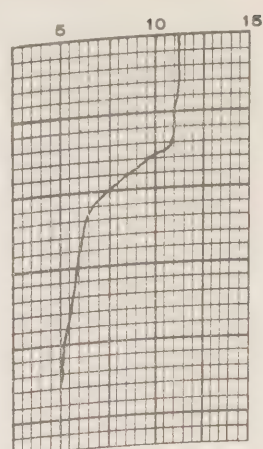
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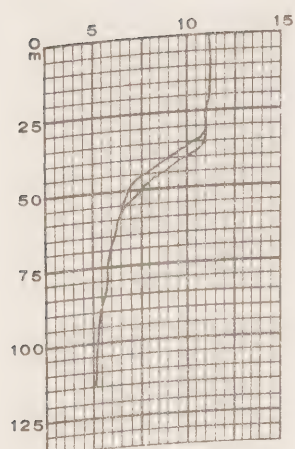
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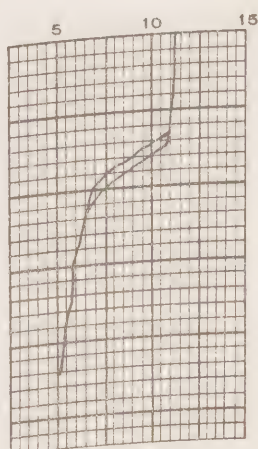
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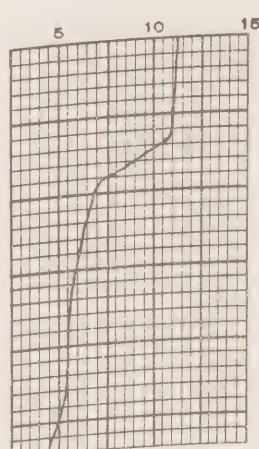
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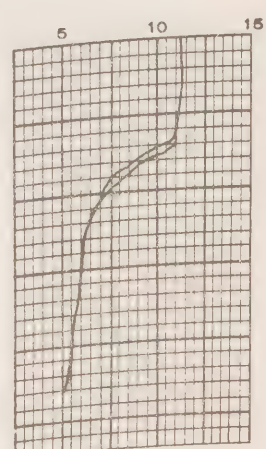
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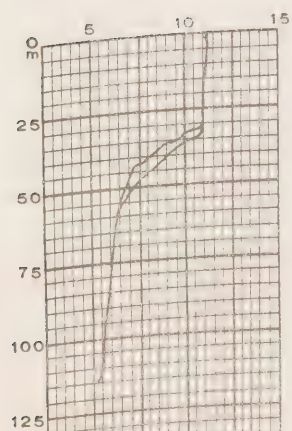
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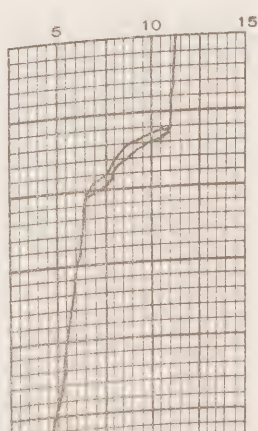
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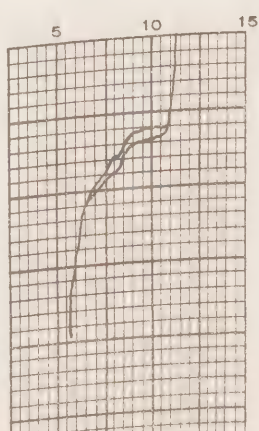
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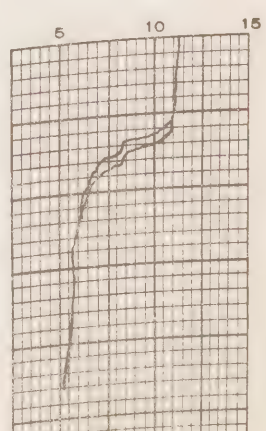
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65-08-03-00.15

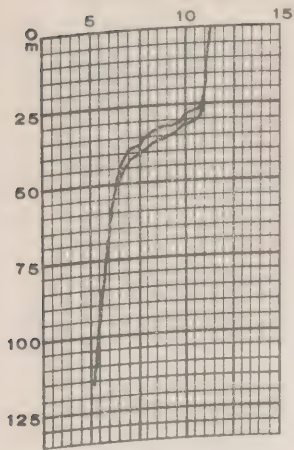


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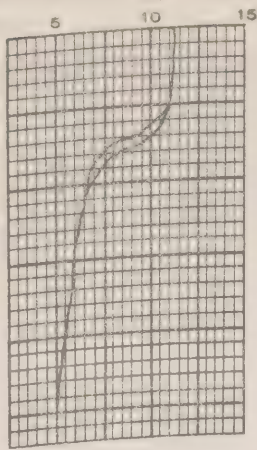


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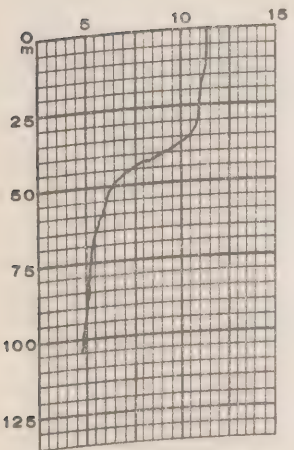
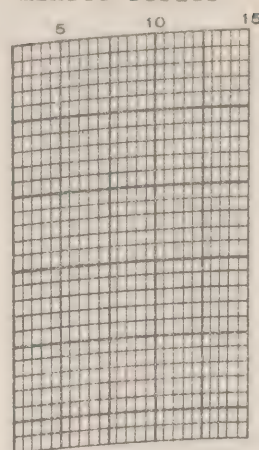
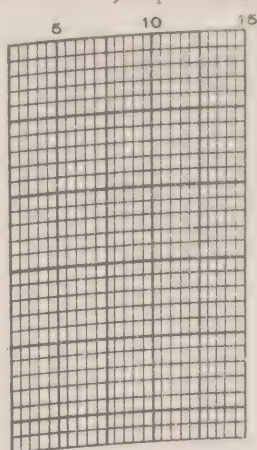
C.C.G.S. "St. Catharines", Survey P-65-3, special 5-minute series



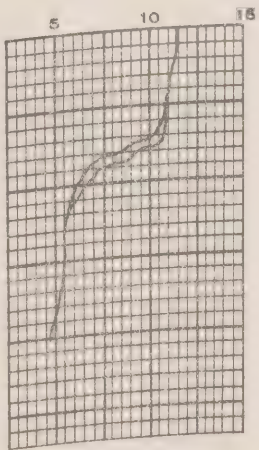
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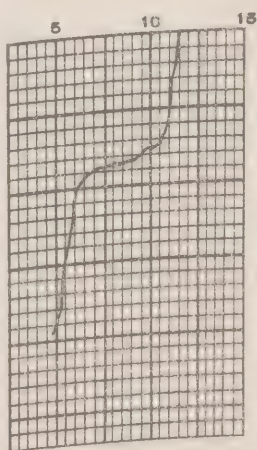
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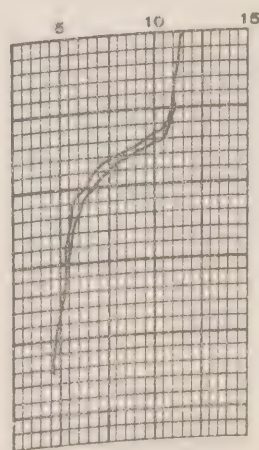
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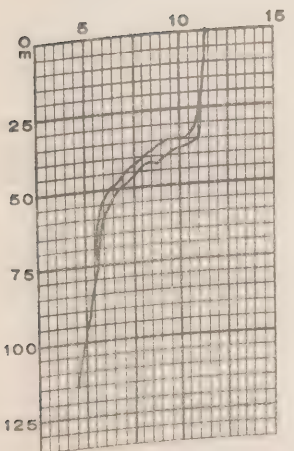
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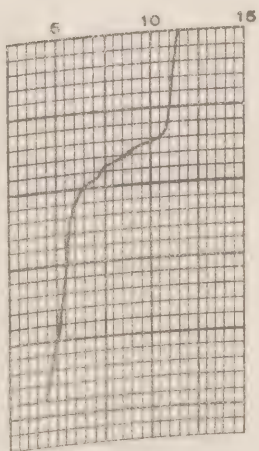
65-08-03-01.00



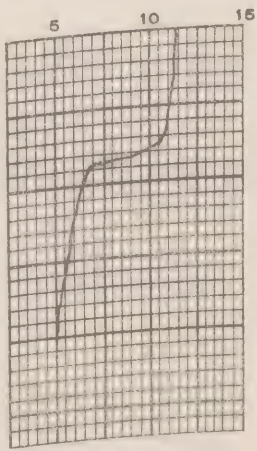
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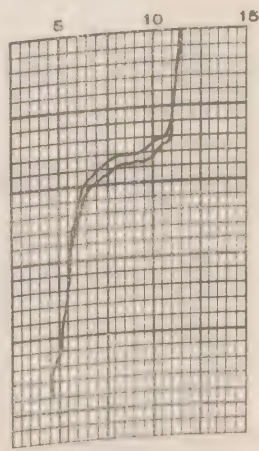
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65-08-03-01.15

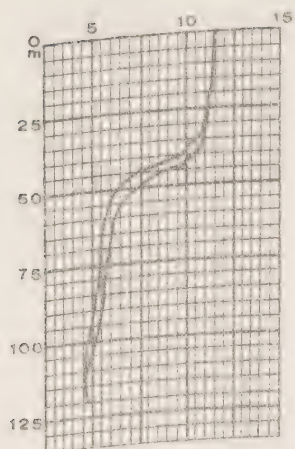


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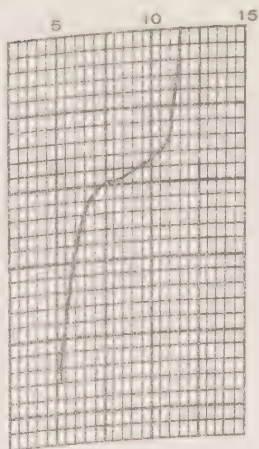


65-08-03-01.25

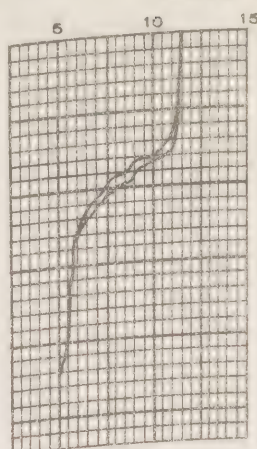
C.C.G.S. "St. Catharines", Survey P-65-3, special 5-minute series



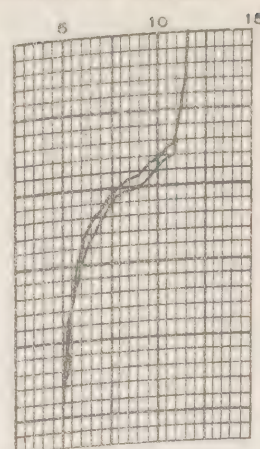
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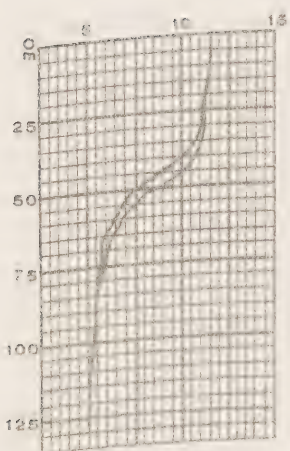
65-08-03-01.35



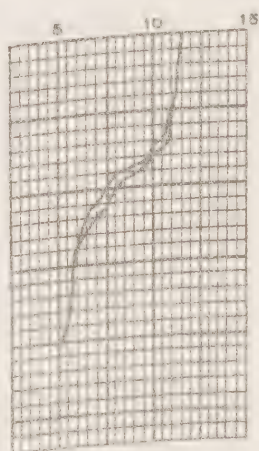
65-08-03-01.40



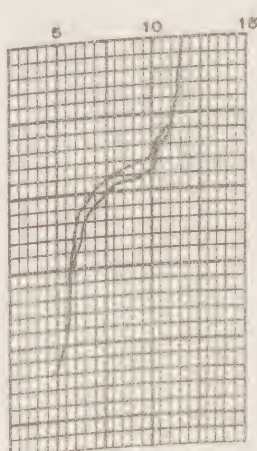
65-08-03-01.45



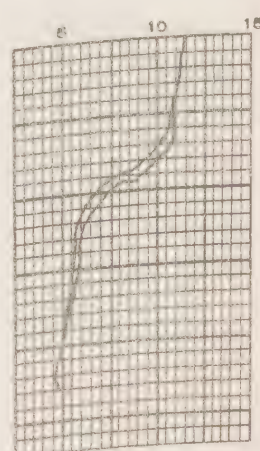
65-08-03-01.50



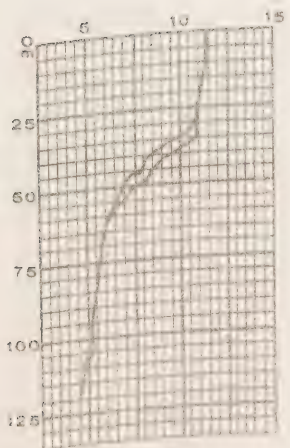
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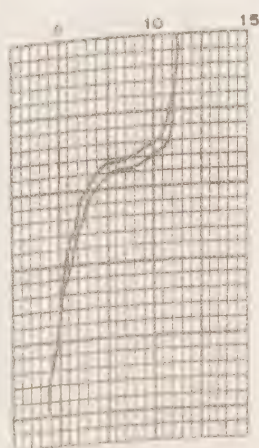
65-08-03-02.00



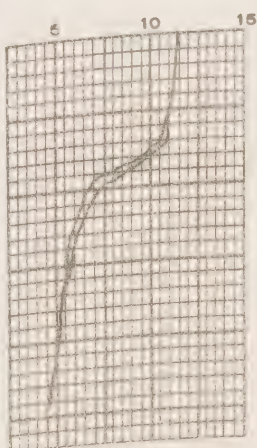
65-08-03-02.05



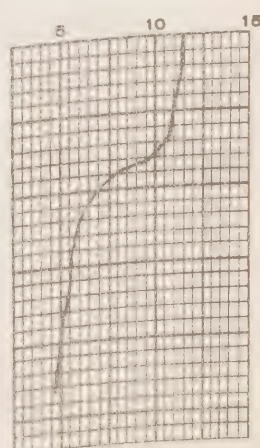
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65-08-03-02.15

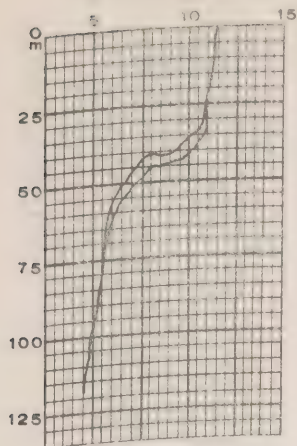


65-08-03-02.20

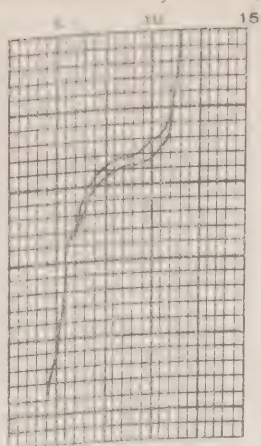


65-08-03-02.25

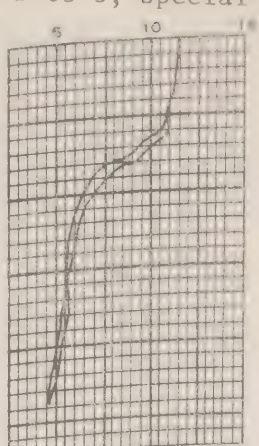
C.C.G.S. "St. Catharines", Survey P-65-3, special 5-minute series



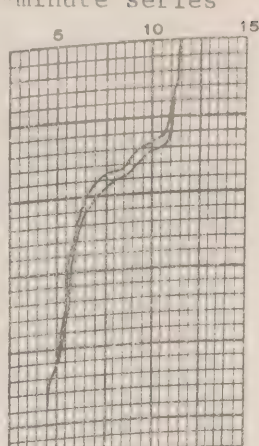
65-08-03-02.30



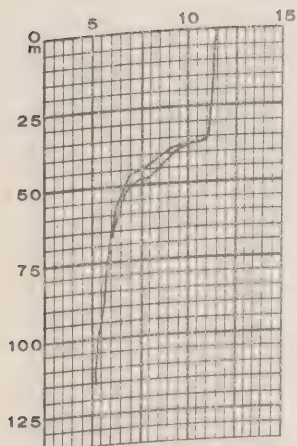
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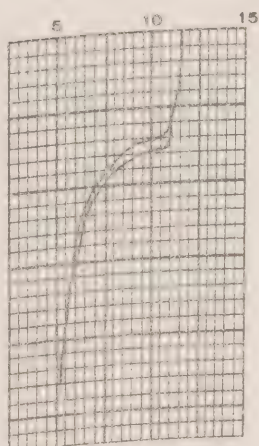
65-08-03-02.40



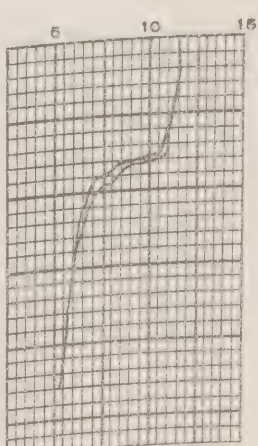
65-08-03-02.45



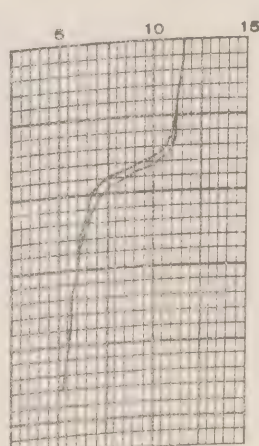
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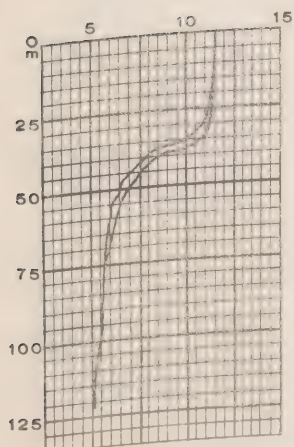
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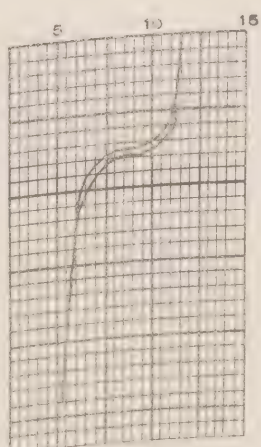
65-08-03-03.00



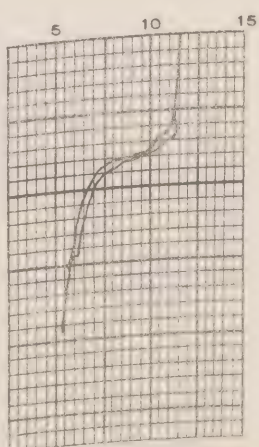
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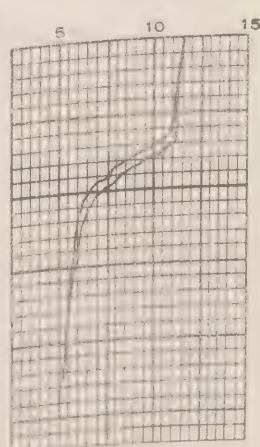
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65-08-03-03.15

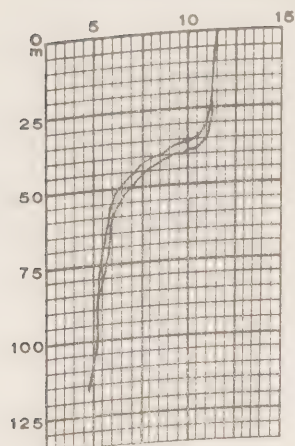


65-08-03-03.20

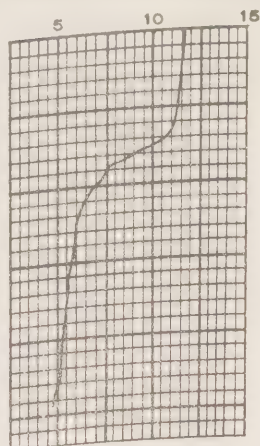


65-08-03-03.25

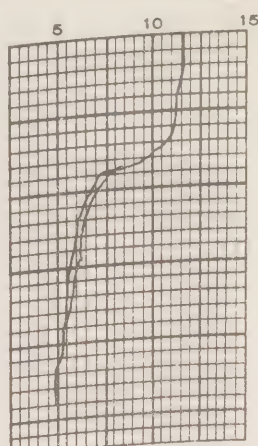
C.C.G.S. "St. Catharines", Survey P-65-3, special 5-minute series



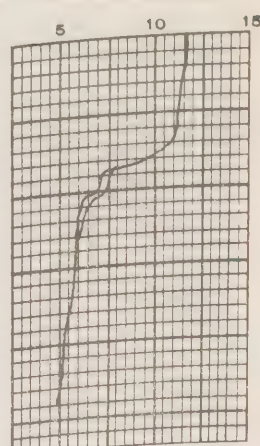
65-08-03-03.30



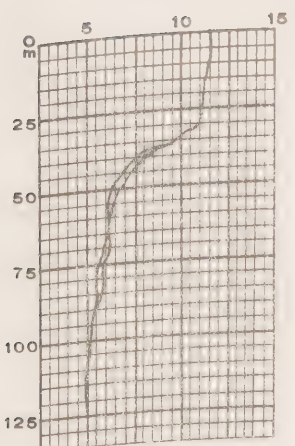
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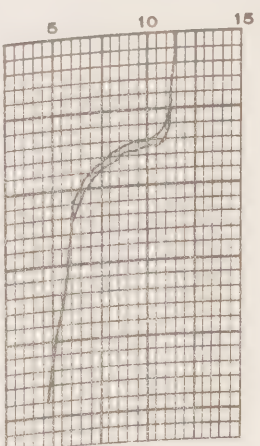
65-08-03-03.40



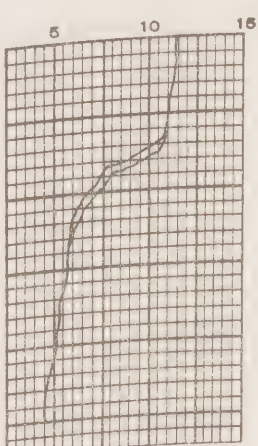
65-08-03-03.45



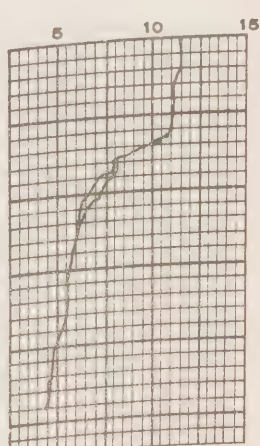
65-08-03-03.50



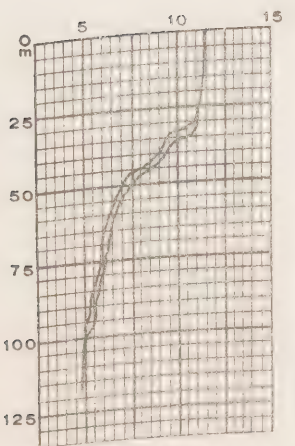
65-08-03-03.55



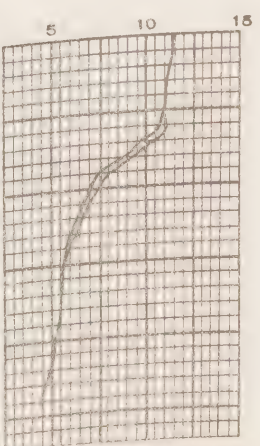
65-08-03-04.00



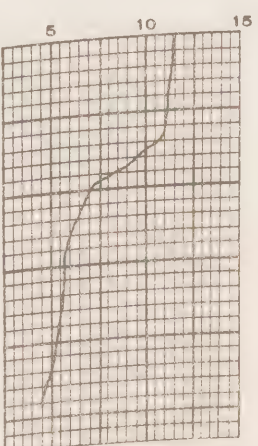
65-08-03-04.05



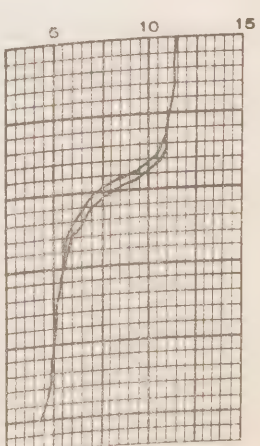
65-08-03-04.10



65-08-03-04.15

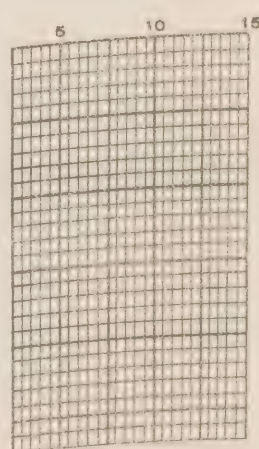
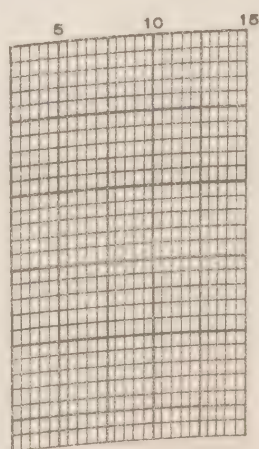
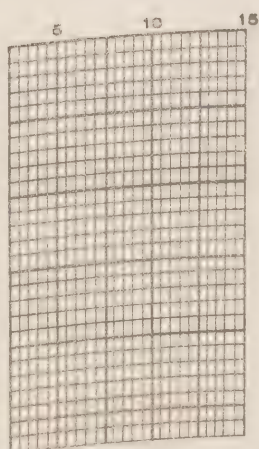
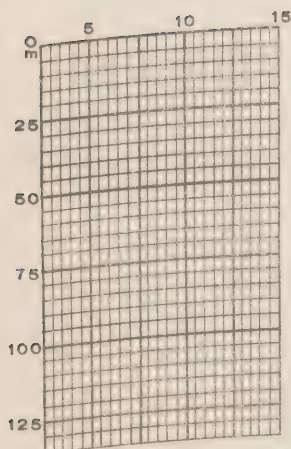
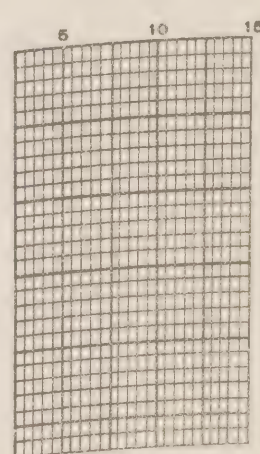
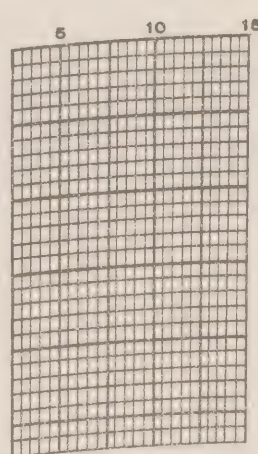
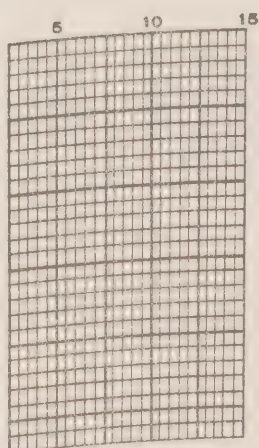
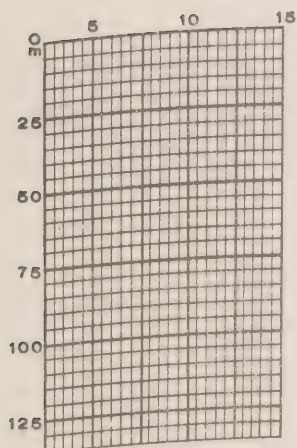
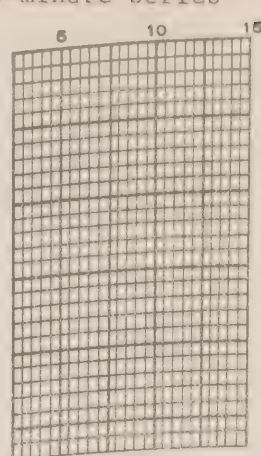
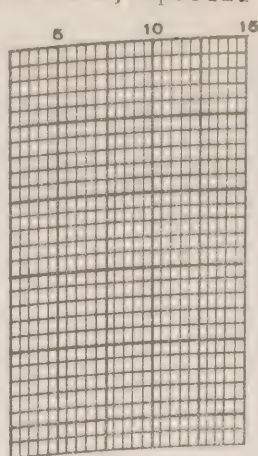
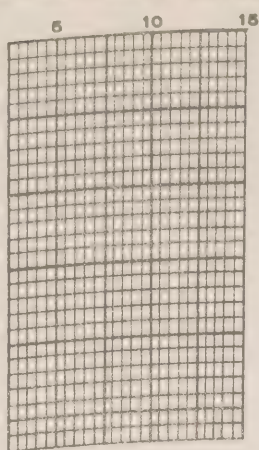
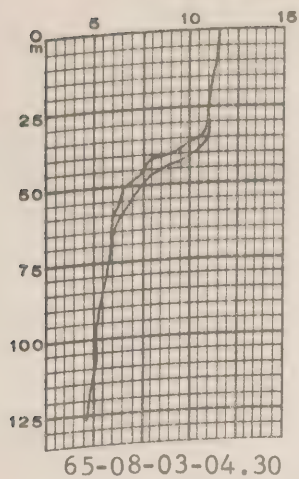


65-08-03-04.20



65-08-03-04.25

C.C.G.S. "St. Catharines", Survey P-65-3, special 5-minute series



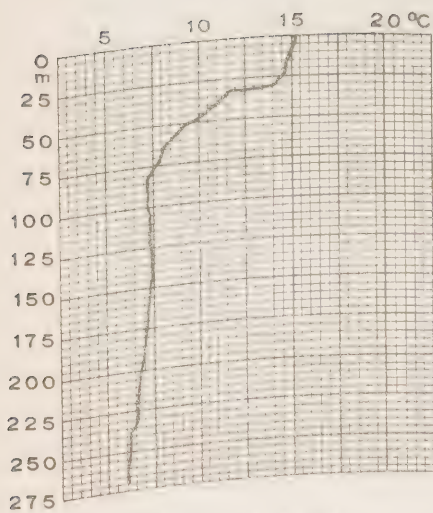
CCGS "STONETOWN" Patrol No. 66

Daily bathythermograms

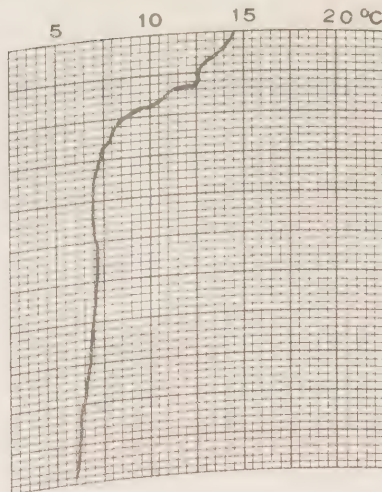
and

OCEAN series bathythermograms

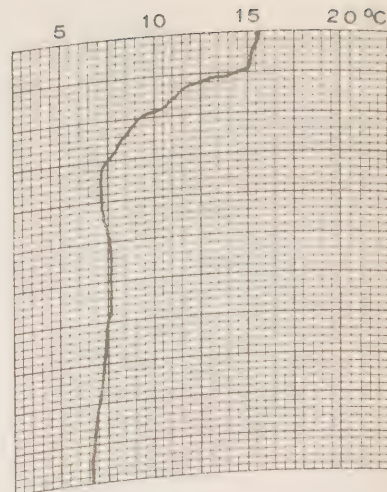
C.C.G.S. "Stonetown", Patrol No. '66



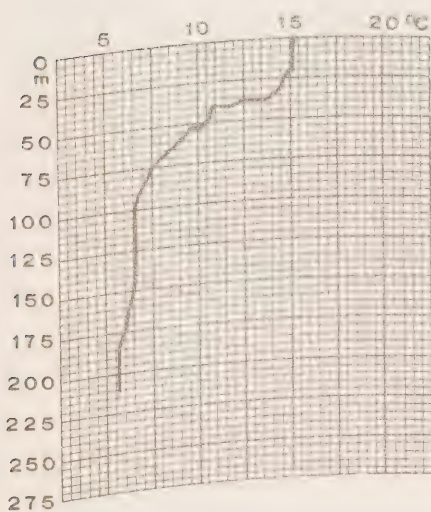
65-08-07-04.0
48°35'n
126°40'w



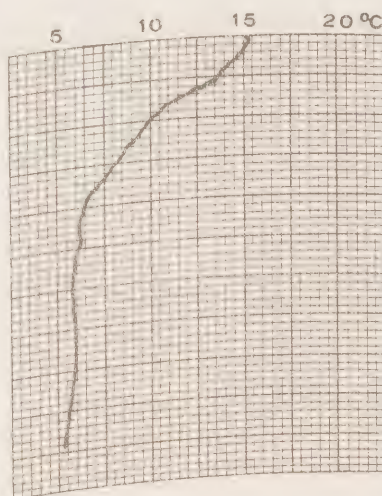
65-08-07-07.2
48°40'n
127°40'w



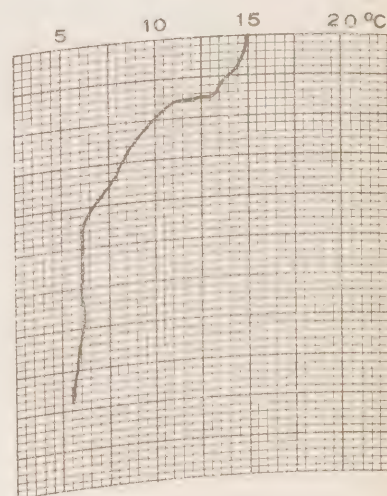
65-08-07-10.3
48°50'n
128°40'w



65-08-07-13.5
48°50'n
129°40'w



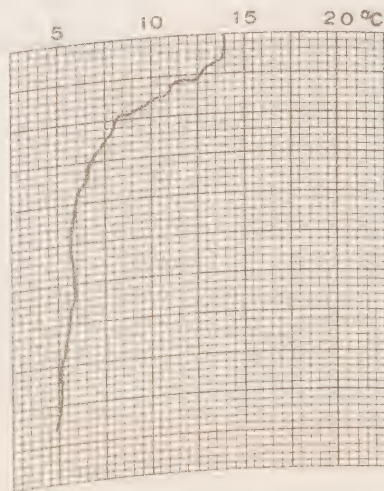
65-08-07-16.8
49°00'n
130°40'w



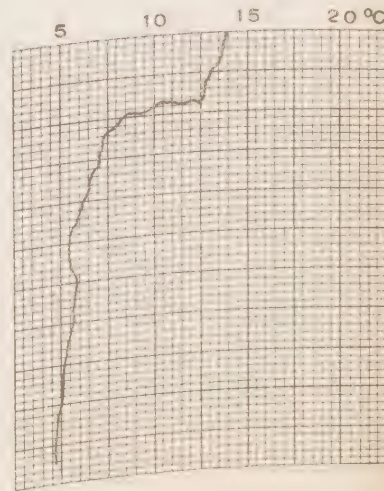
65-08-07-20.3
49°03'n
131°40'w



65-08-08-00.0
49°10'n
132°40'w

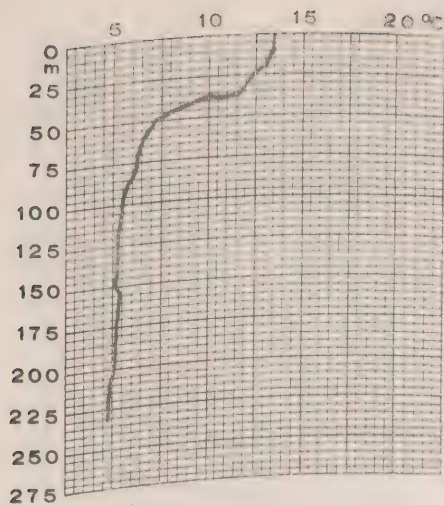


65-08-08-03.5
49°15'n
133°40'w

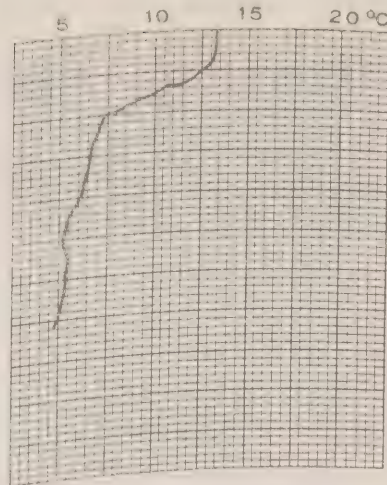


65-08-08-06.8
49°21'n
134°40'w

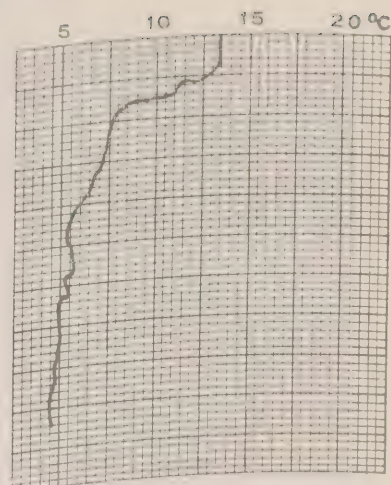
C.C.G.S. "Stonetown", Patrol No. 66



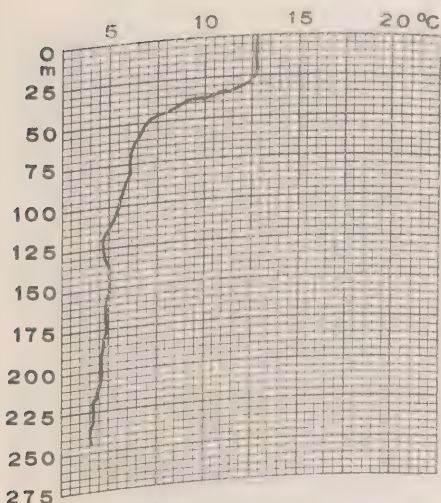
65-08-08-09.5
49°26'n
135°40'w



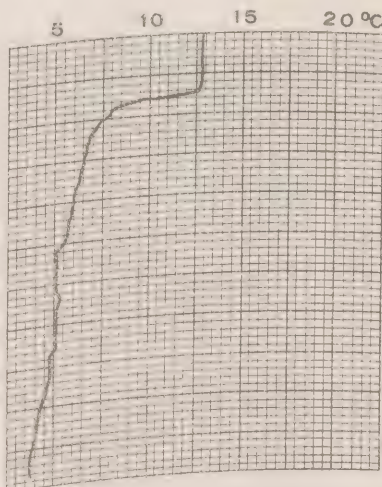
65-08-08-12.5
49°30'n
136°40'w



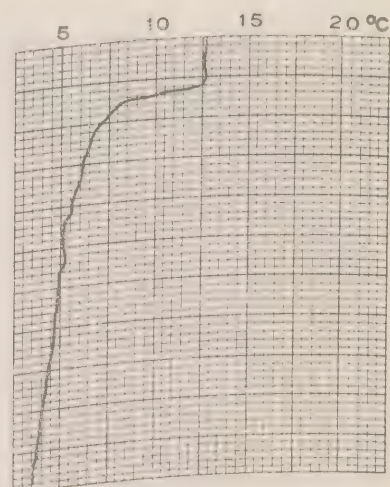
65-08-08-16.2
49°39'n
137°40'w



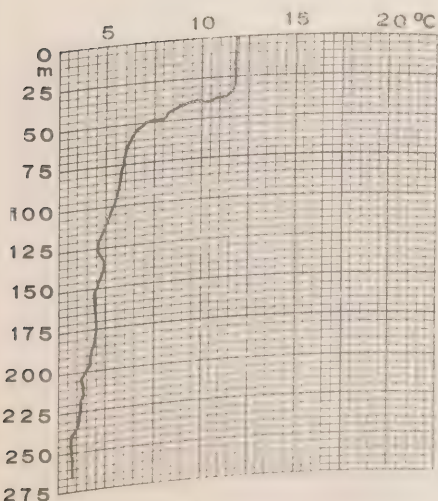
65-08-08-20.0
49°40'n
138°40'w



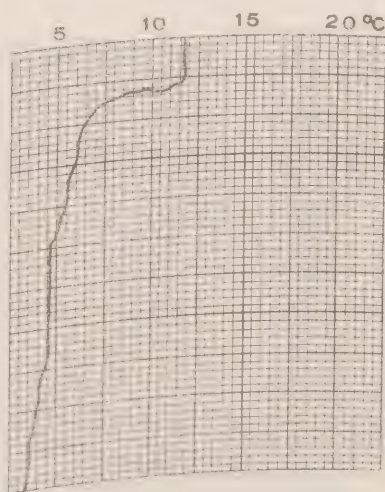
65-08-09-04.3
49°43'n
139°40'w



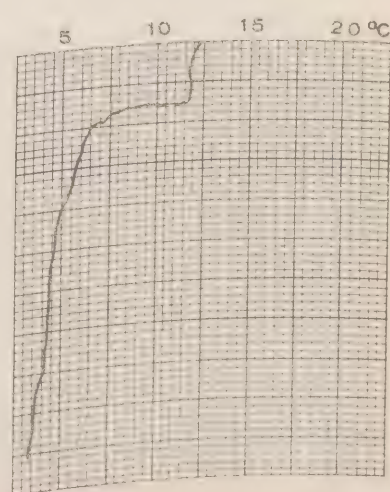
65-08-09-09.5
49°45'n
140°40'w



65-08-09-18.0
49°44'n
142°36'w

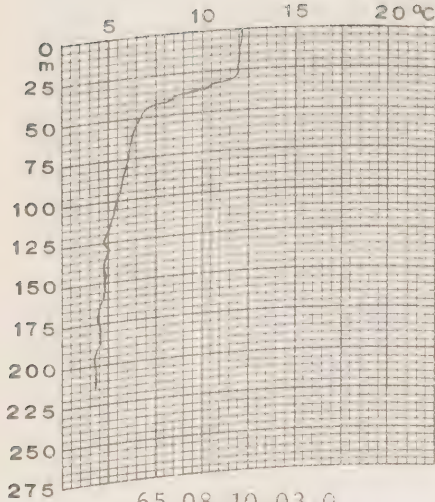


65-08-09-21.0
49°45'n
143°04'w

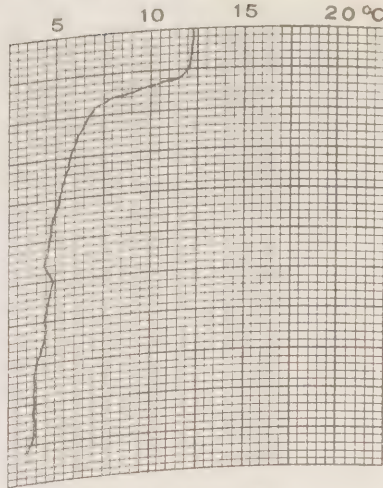


65-08-10-00.0
49°46'n
143°47'w

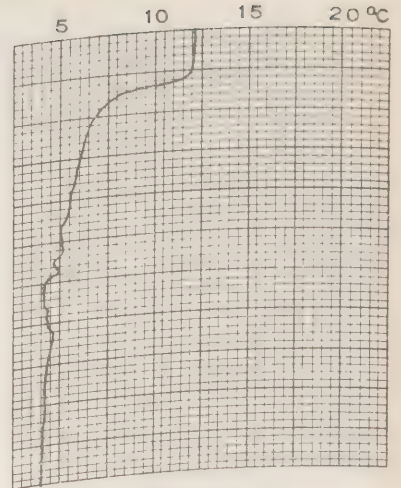
C.C.G.S. "Stonetown", Patrol No. 66



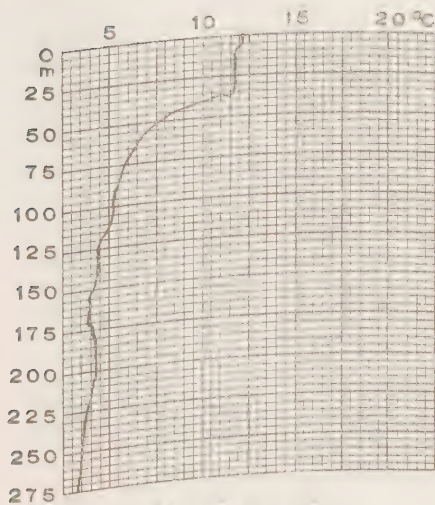
65-08-10-03.0
49°50'N
144°22'W



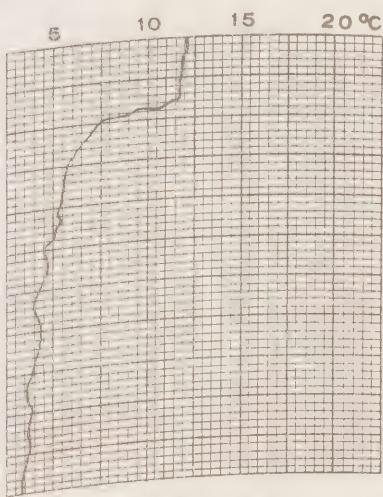
65-08-10-06.0
50°01'N
144°50'W



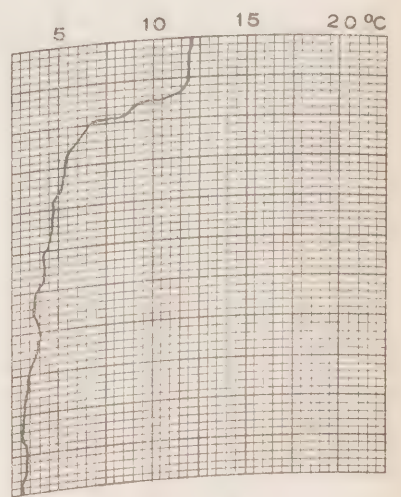
65-08-10-09.0
49°59'N
144°57'W



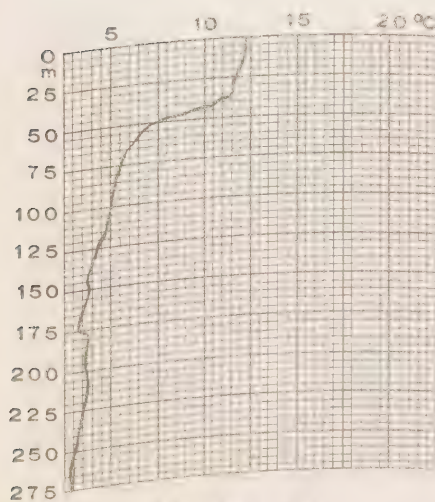
65-08-10-12.0
50°07'N
144°50'W



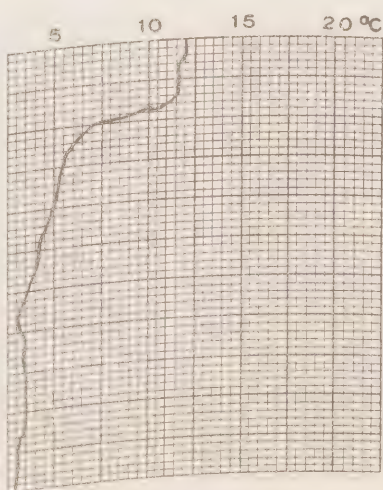
65-08-10-15.0
50°10'N
144°50'W



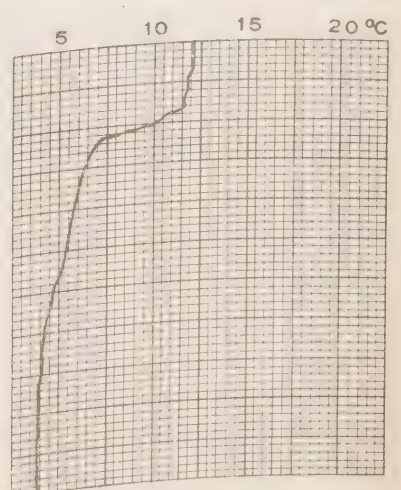
65-08-10-18.0
49°56'N
144°52'W



65-08-10-21.0
49°58'N
144°49'W

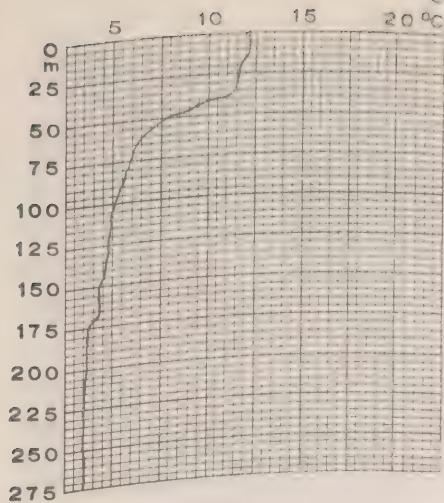


65-08-11-00.0
49°56'N
145°04'W

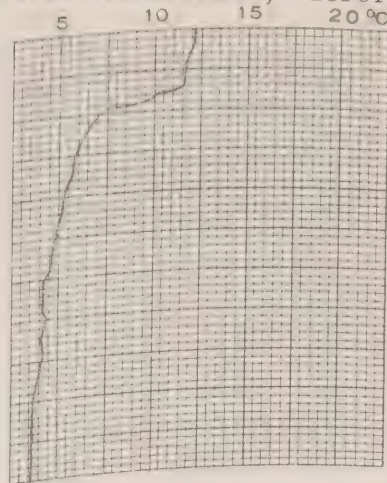


65-08-11-03.0
49°56'N
145°00'W

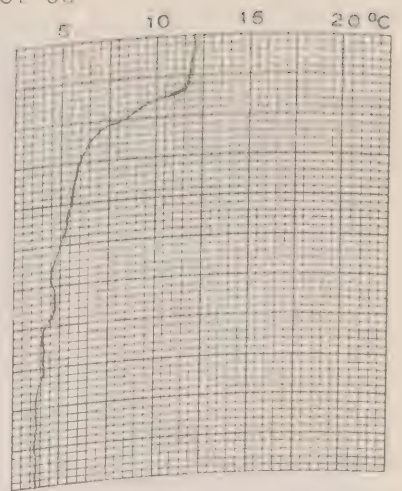
C.C.G.S. "Stonetown", Patrol No. 66



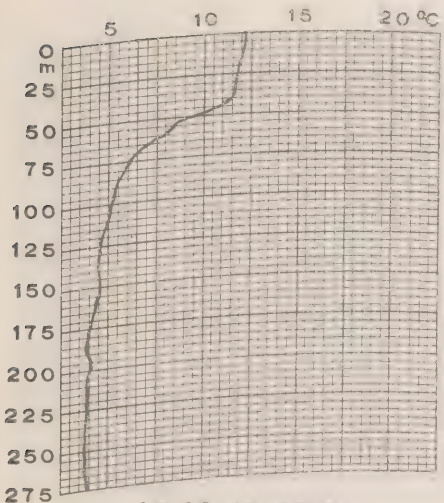
65-08-11-06.0
 49°54'n
 144°56'w



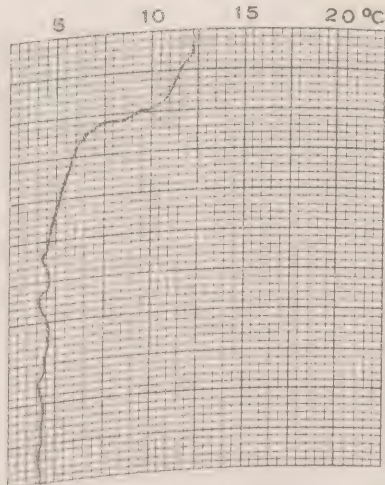
65-08-11-09.0
 49°54'n
 145°00'w



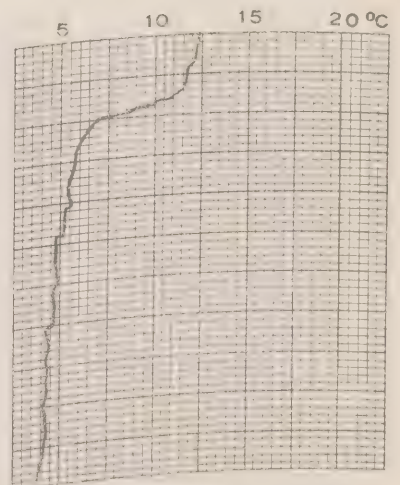
65-08-11-12.0
 49°53'n
 145°01'w



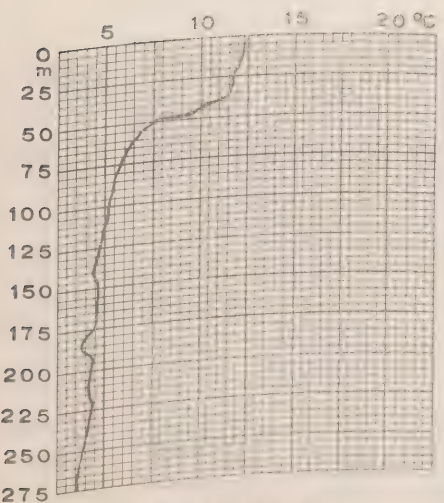
65-08-11-15.0
 49°53'n
 145°00'w



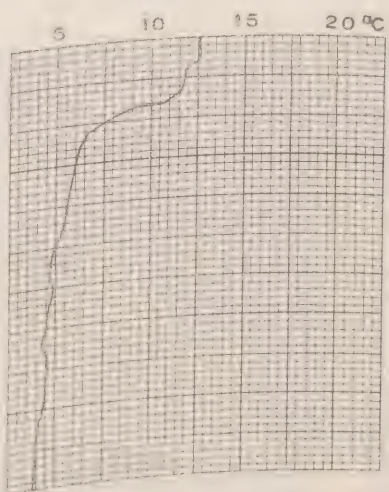
65-08-11-18.0
 49°57'n
 144°48'w



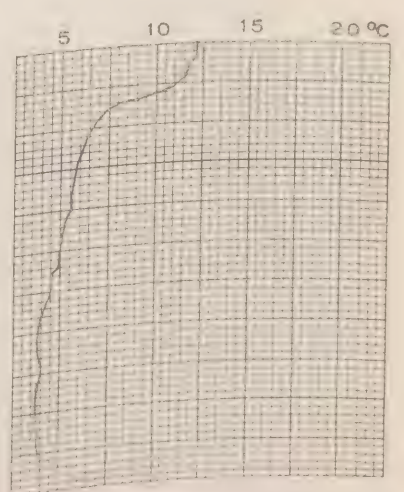
65-08-11-21.0
 49°57'n
 144°48'w



65-08-12-00.0
 49°53'n
 144°42'w

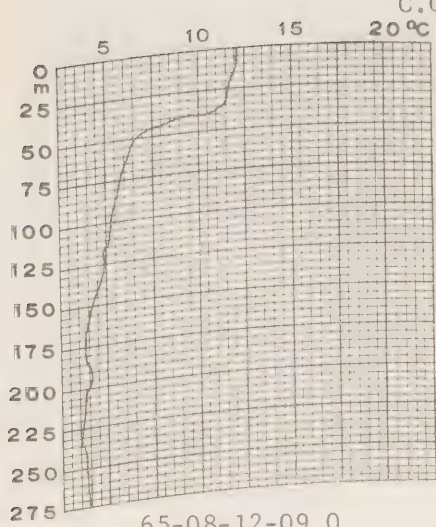


65-08-12-03.0
 49°53'n
 144°40'w



65-08-12-06.0
 50°03'n
 144°54'w

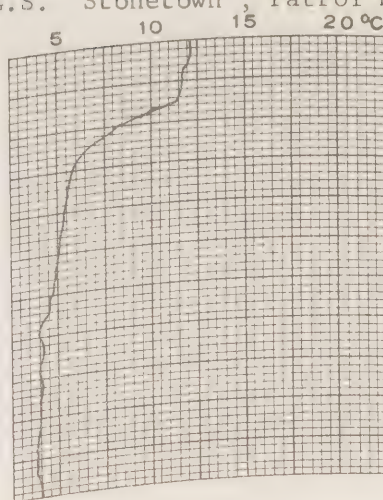
C.C.G.S. "Stonetown", Patrol No. 66



65-08-12-09.0

49°58'n

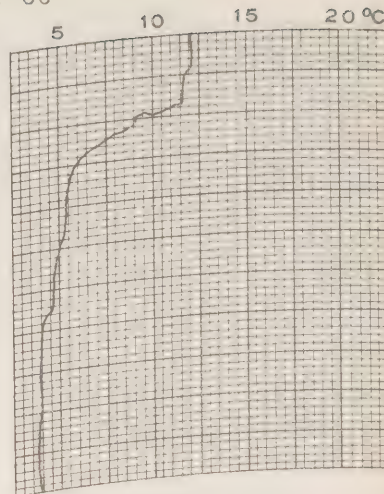
144°52'w



65-08-12-12.0

50°03'n

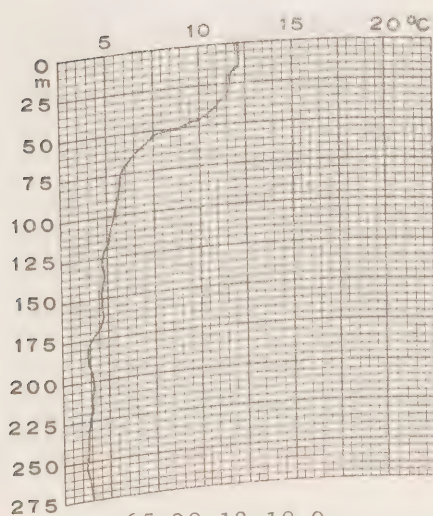
144°44'w



65-08-12-15.0

49°59'n

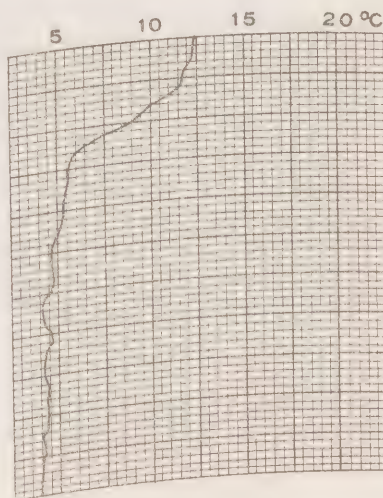
144°50'w



65-08-12-18.0

49°57'n

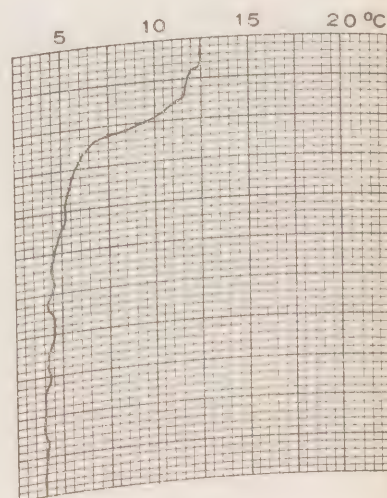
144°49'w



65-08-12-21.0

49°59'n

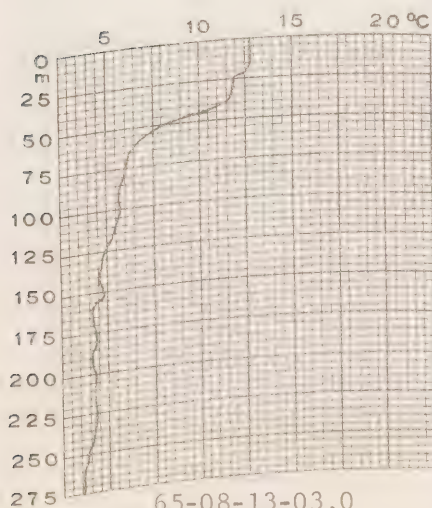
144°48'w



65-08-13-00.0

49°59'n

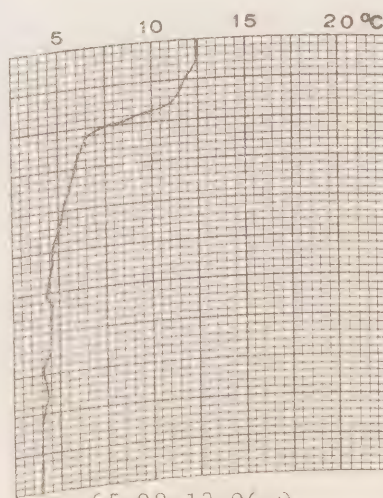
144°41'w



65-08-13-03.0

49°52'n

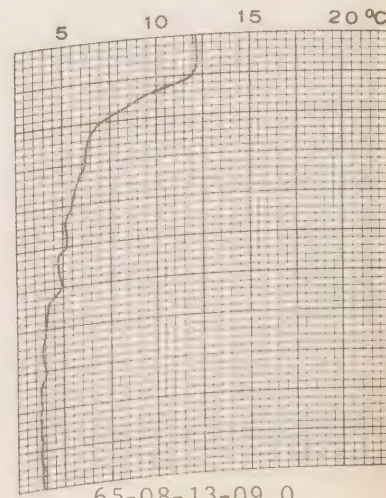
144°39'w



65-08-13-06.0

49°54'n

144°41'w

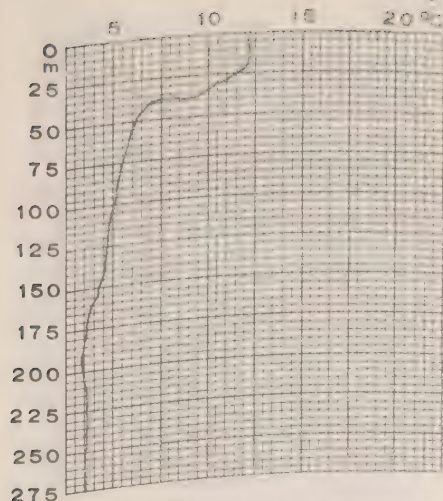


65-08-13-09.0

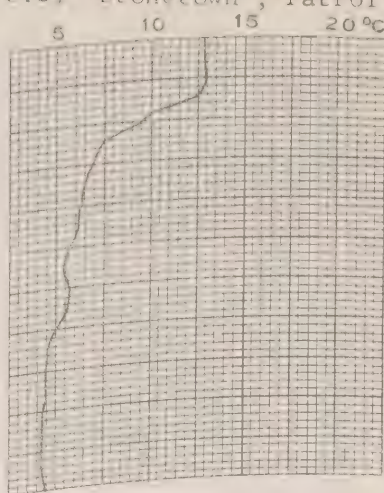
49°55'n

144°48'w

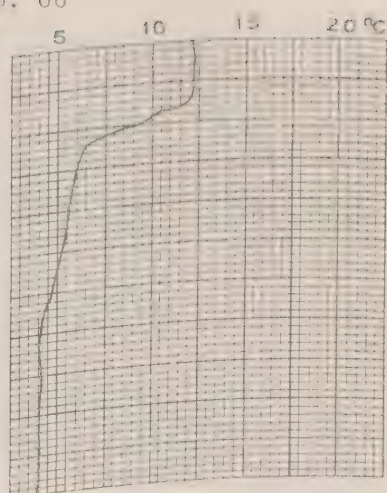
C.C.G.S. "Stonetown", Patrol No. 66



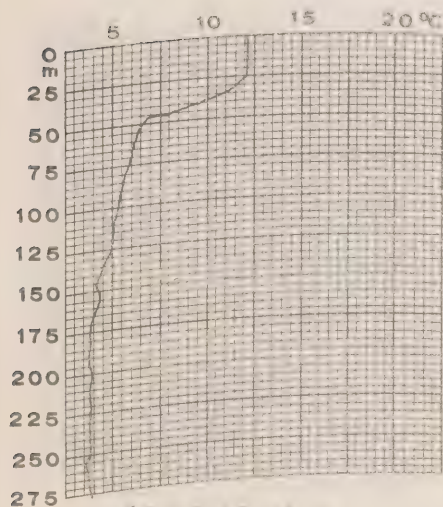
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50°11'n
144°59'w



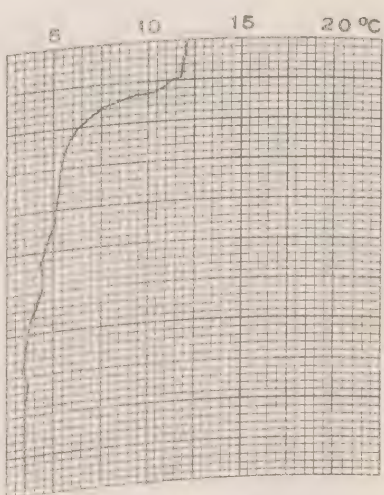
65-08-13-15.0
50°12'n
145°05'w



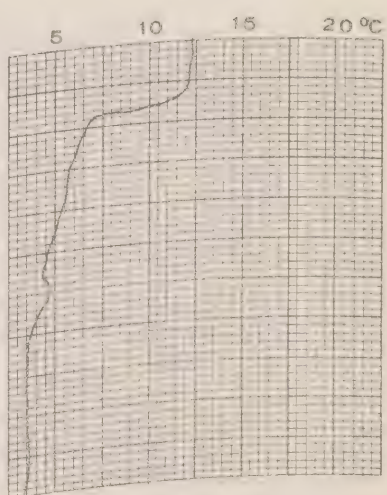
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50°07'n
144°58'w



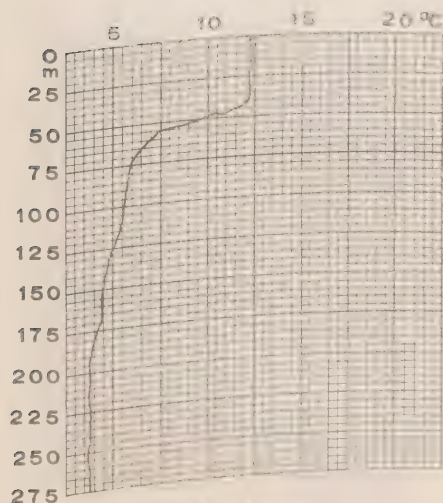
65-08-13-21.0
50°08'n
144°57'w



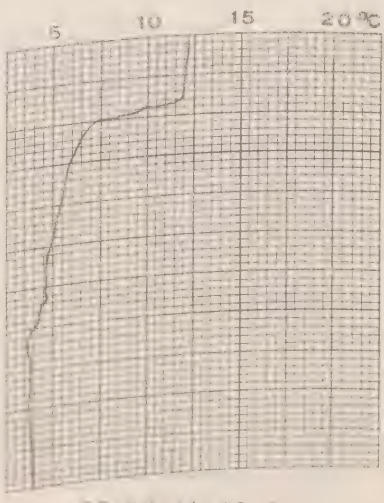
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50°01'n
145°01'w



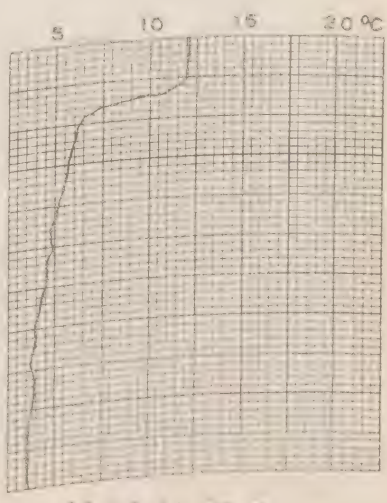
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50°06'n
145°00'w



65-08-14-06.0
50°10'n
145°01'w

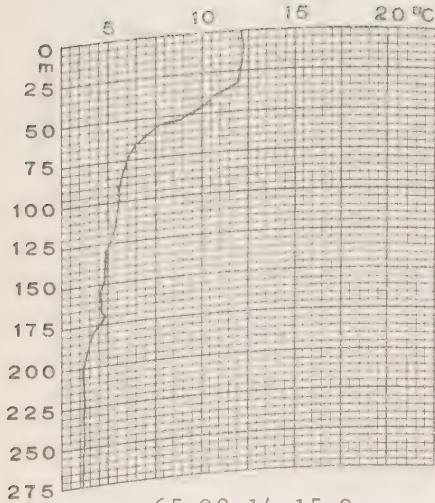


65-08-14-00.0
50°09'n
144°55'w

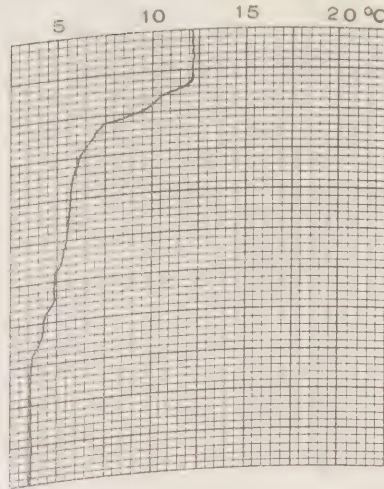


65-08-14-12.0
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144°57'w

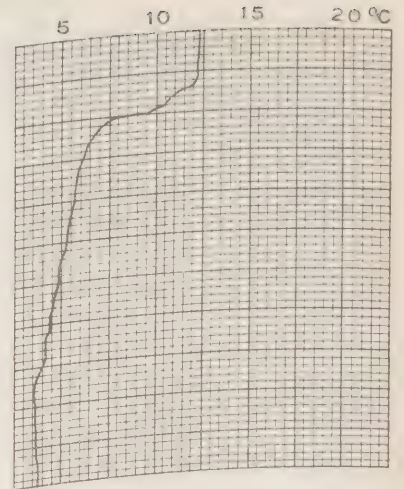
C.C.G.S. "Stonetown", Patrol No. 66



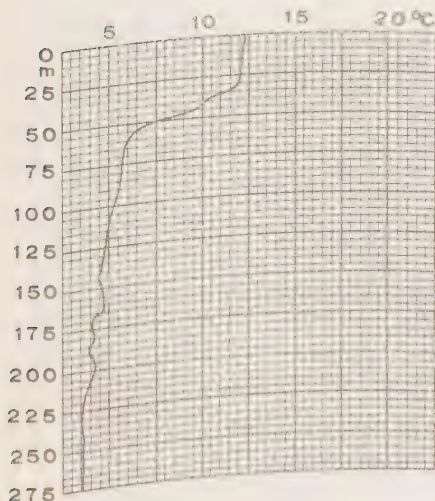
65-08-14-15.0
50°03'N
144°57'W



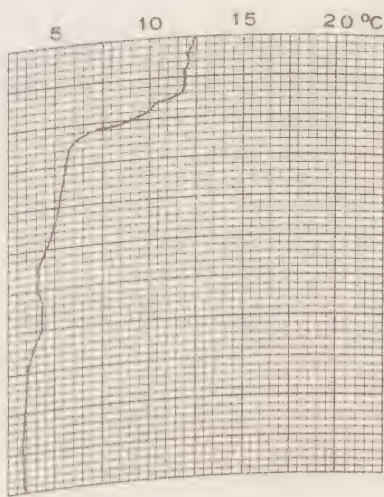
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50°00'N
144°50'W



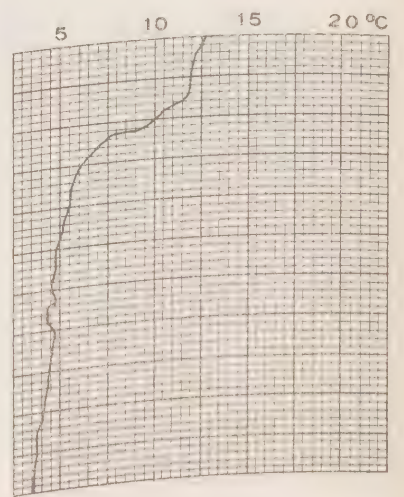
65-08-14-21.0
50°00'N
144°59'W



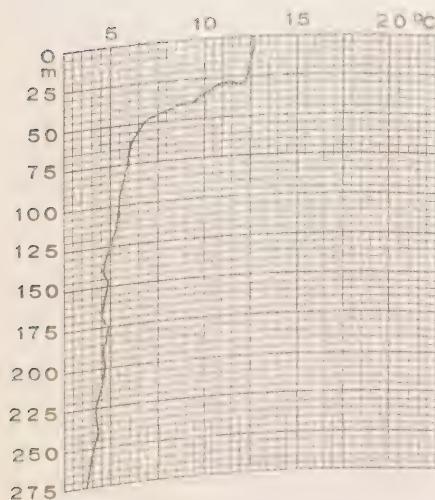
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49°56'N
144°55'W



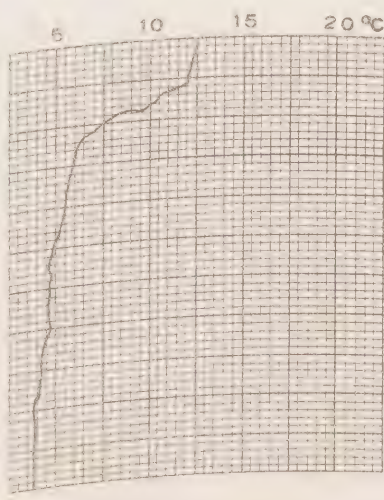
65-08-15-03.0
49°58'N
144°52'W



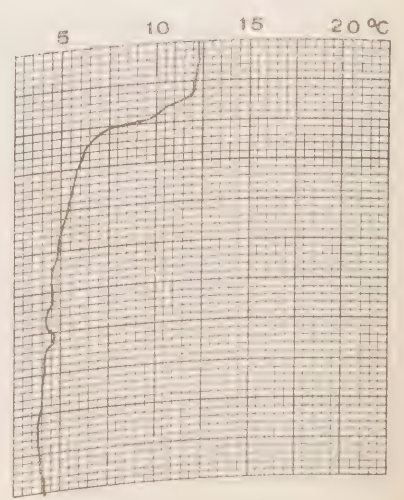
65-08-15-06.0
49°55'N
144°52'W



65-08-15-09.0
49°58'N
144°52'W

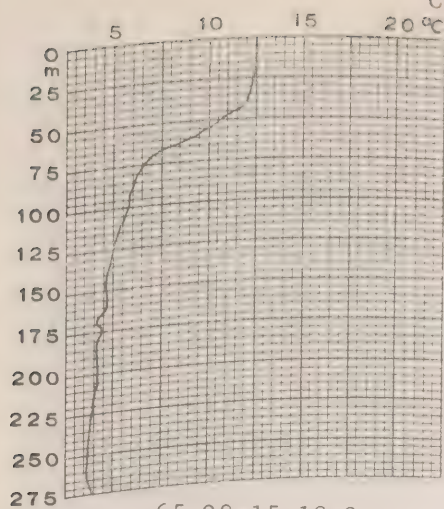


65-08-15-12.0
50°00'N
144°47'W

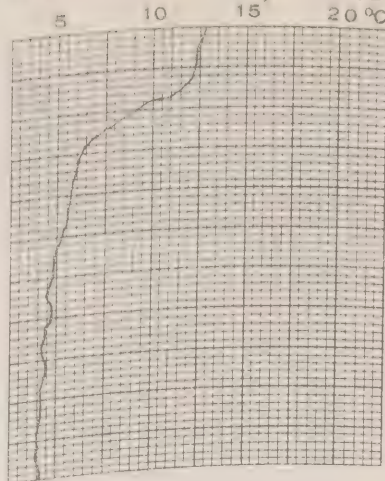


65-08-15-15.0
50°02'N
144°47'W

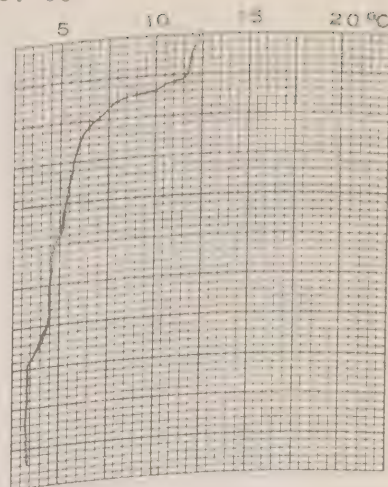
C.C.G.S. "Stonetown", Patrol No. 66



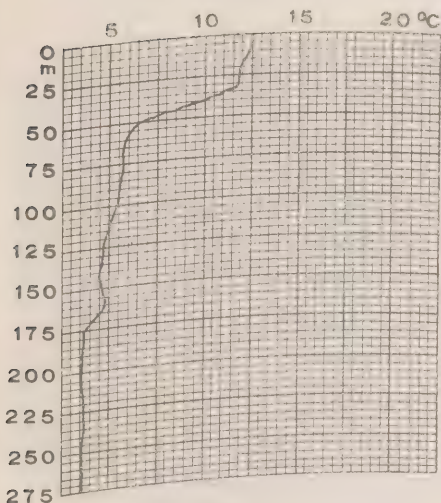
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49°59'N
144°41'W



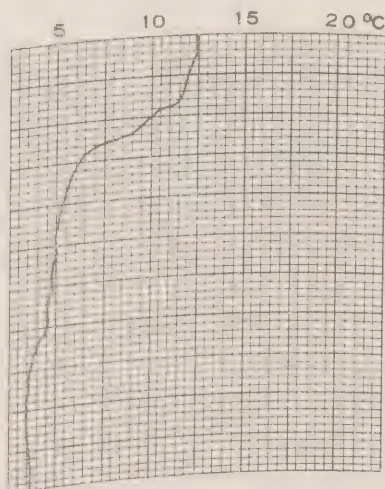
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144°39'W



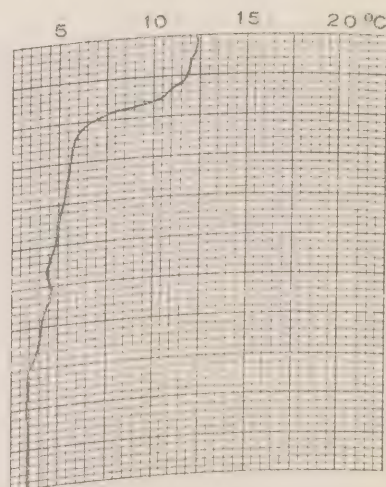
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49°56'N
145°05'W



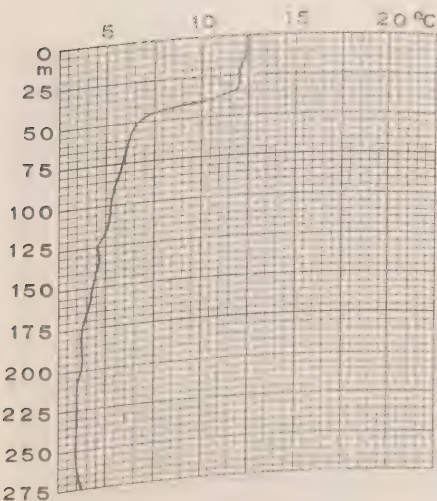
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50°02'N
145°01'W



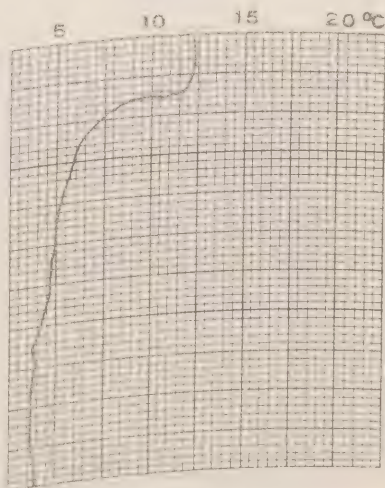
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144°56'W



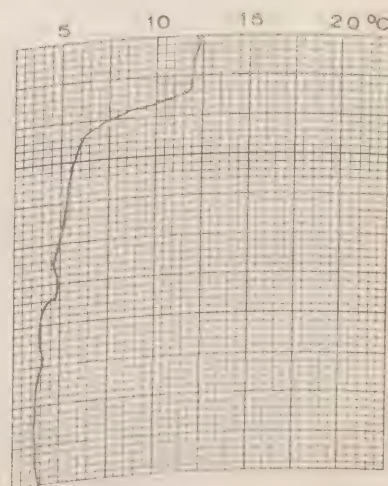
65-08-16-09.0
50°07'N
144°53'W



65-08-16-12.0
50°10'N
144°50'W

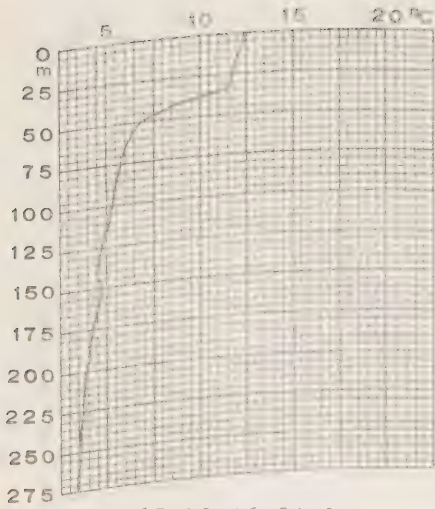


65-08-16-15.0
50°06'N
144°44'W

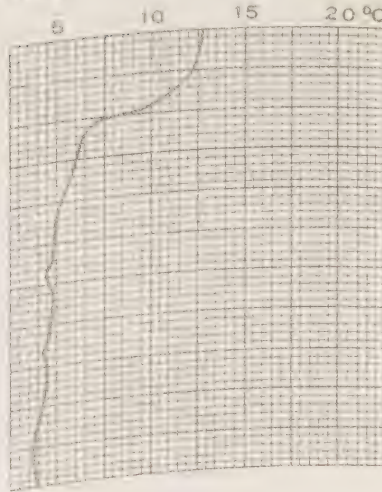


65-08-16-18.0
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144°43'W

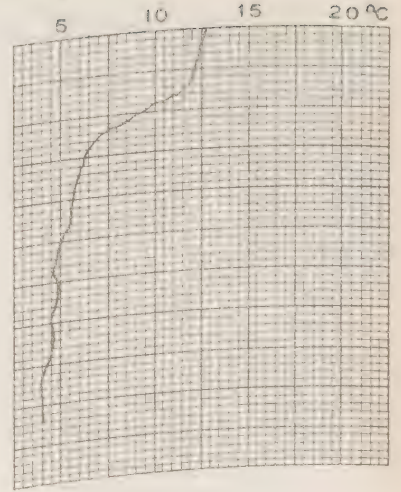
U.S.G.S. "Stonetown", Patrol No. 66



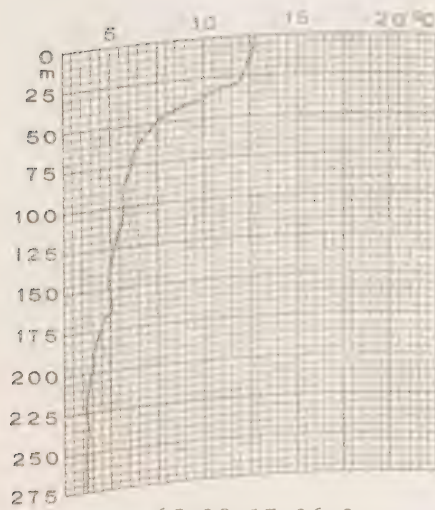
65-08-16-21.0
50°11'n
144°44'w



65-08-17-00.0
50°13'n
144°36'w



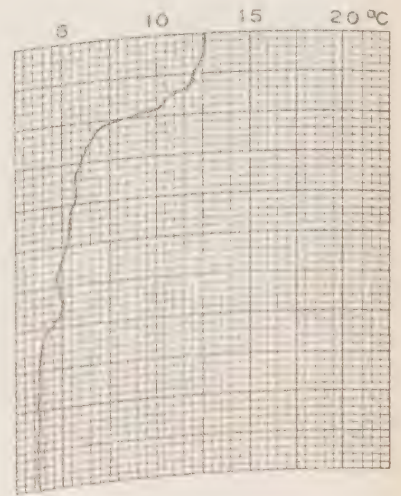
65-08-17-03.0
50°10'n
144°40'w



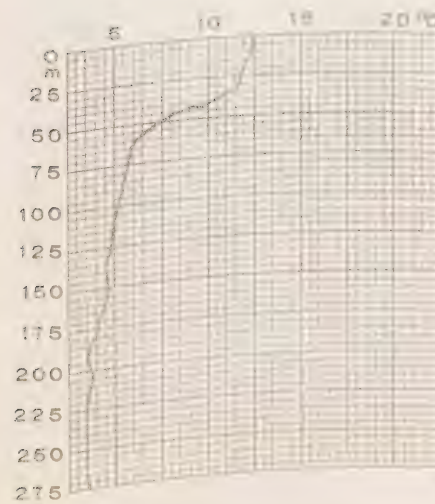
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50°04'n
144°59'w



65-08-17-09.0
50°08'n
144°59'w



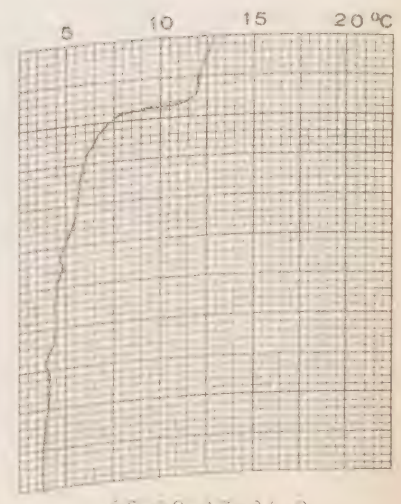
65-08-17-12.0
50°15'n
144°57'w



65-08-17-15.0
50°10'n
144°50'w

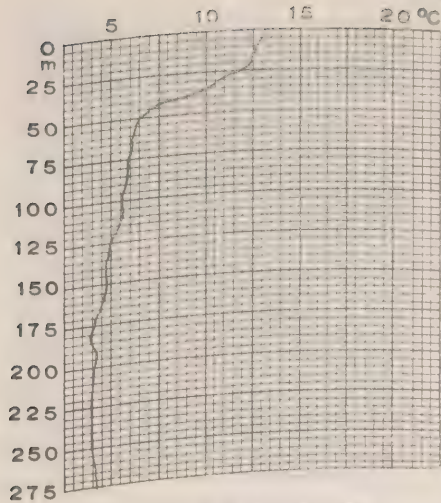


65-08-17-18.0
50°08'n
144°48'w

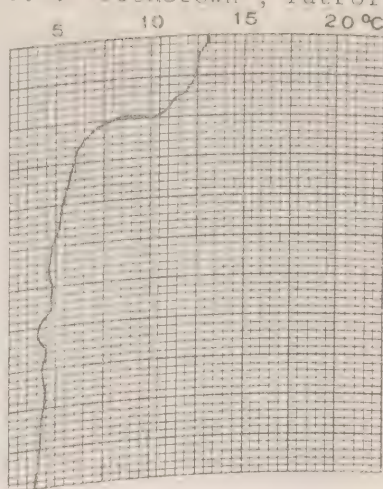


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50°10'n
144°49'w

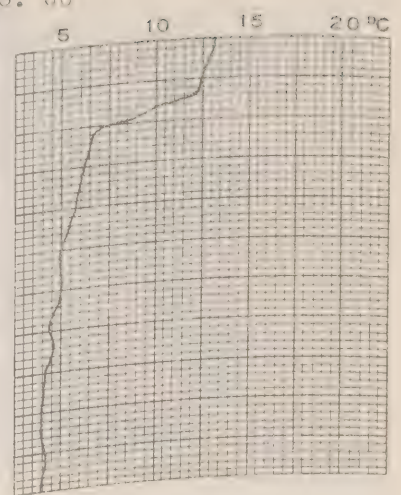
C.C.G.S. "Stonetown", Patrol No. 66



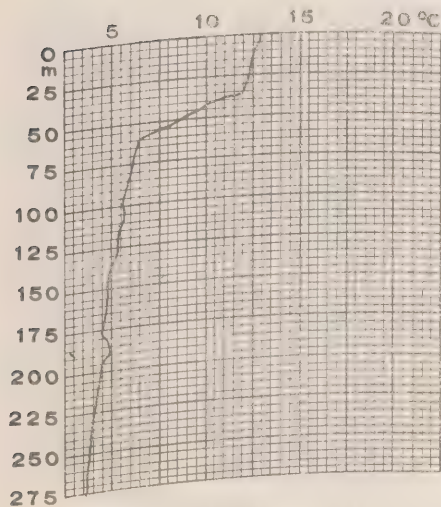
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144°48'W



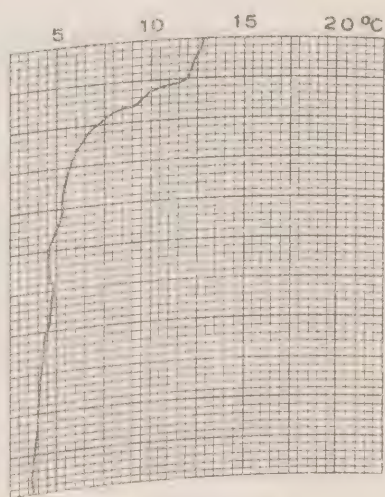
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50°15'N
144°46'W



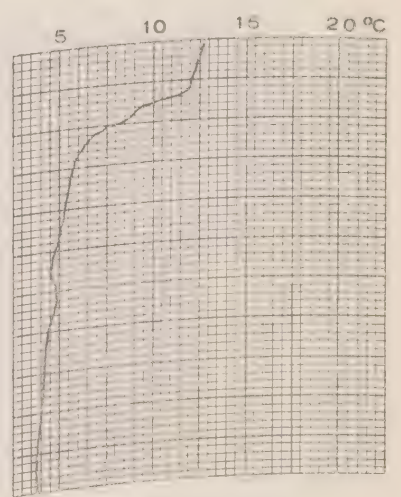
65-08-18-06.0
50°02'N
145°00'W



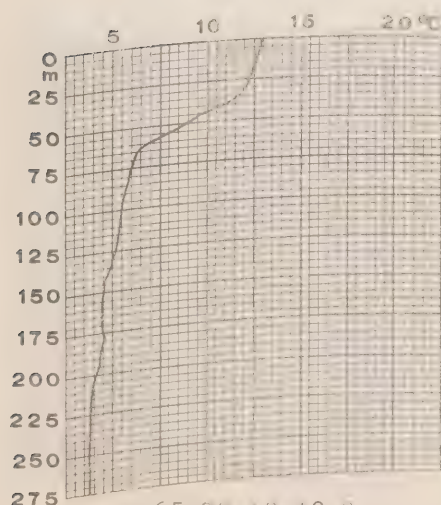
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144°54'W



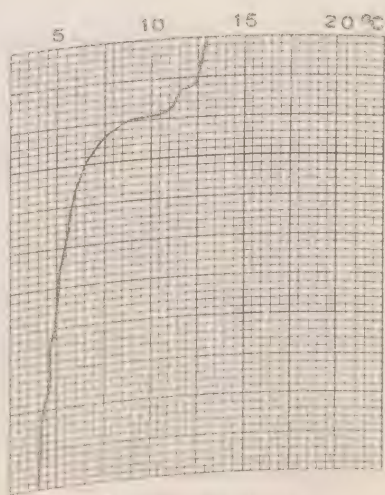
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144°52'W



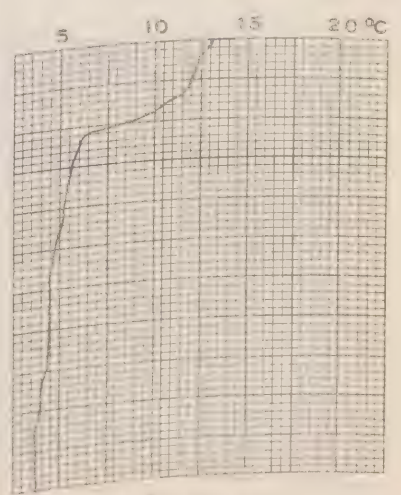
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144°50'W



65-08-18-18.0
50°02'N
144°51'W

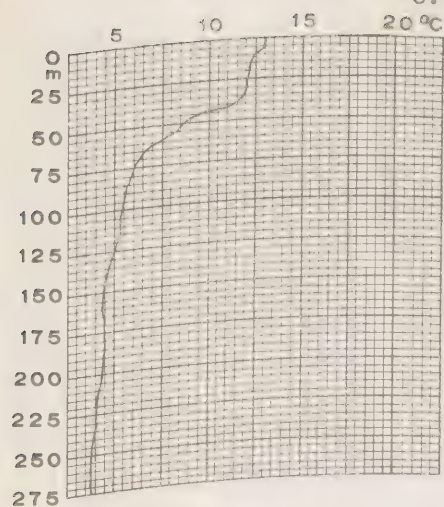


65-08-18-21.0
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144°45'W

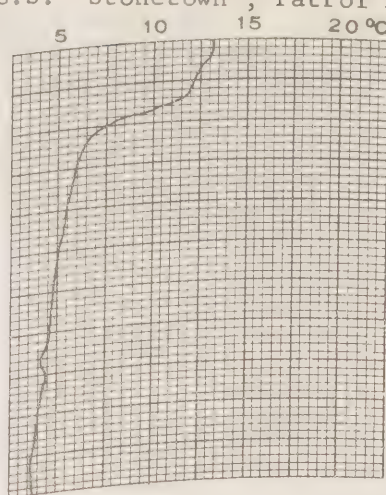


65-08-19-00.0
50°05'N
144°45'W

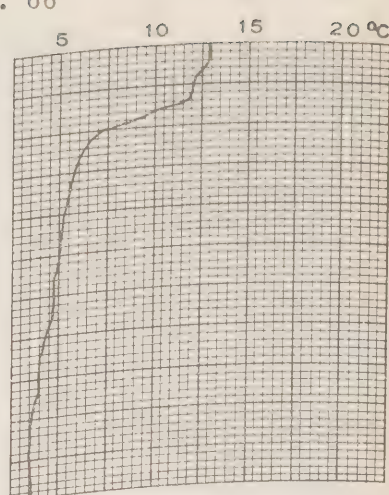
C.C.G.S. "Stonetown", Patrol No. 66



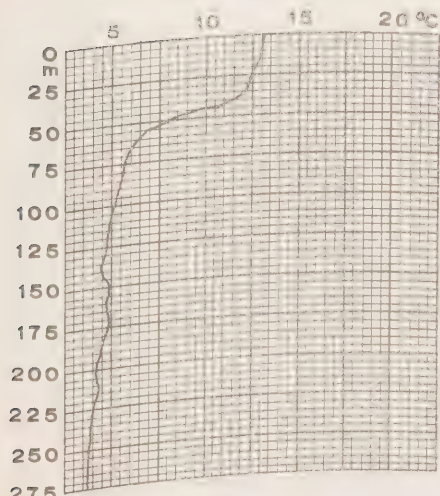
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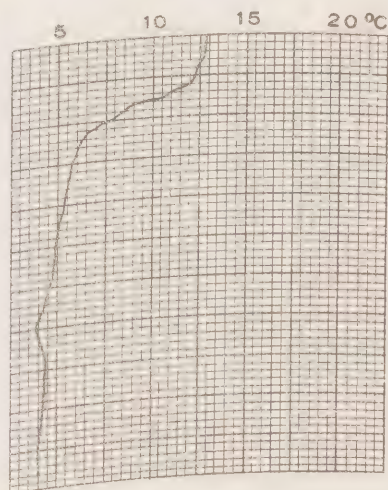
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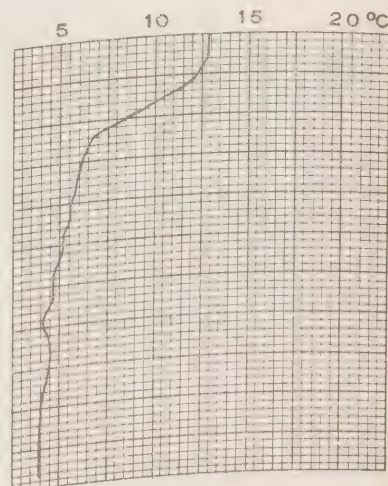
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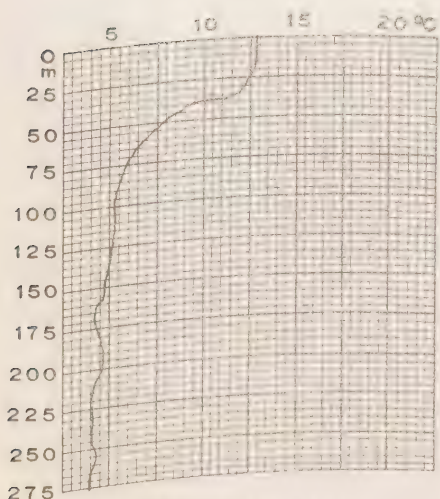
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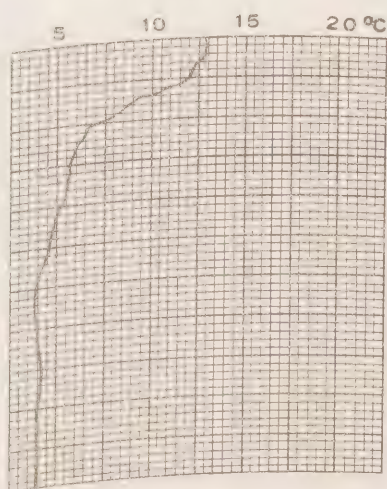
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50°11'n
144°37'w



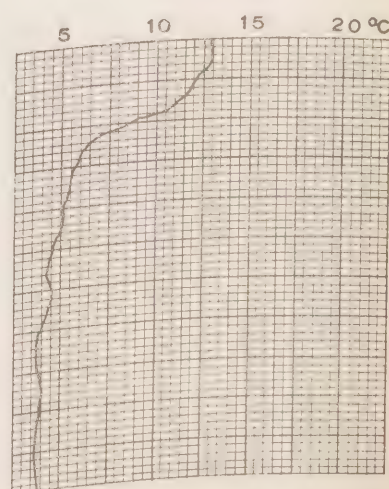
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144°38'w



65-08-19-21.0
50°09'n
144°37'w

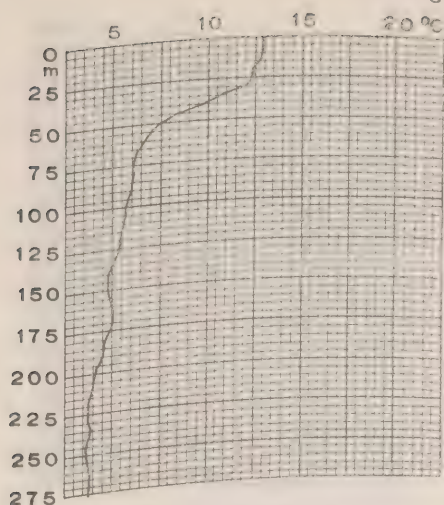


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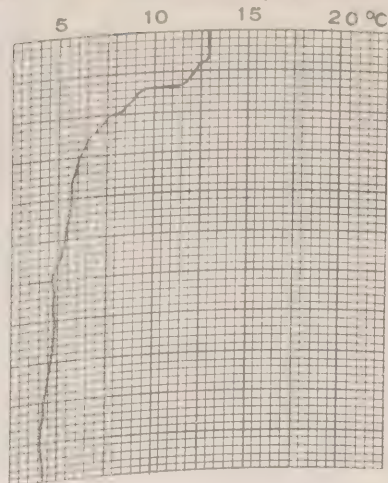


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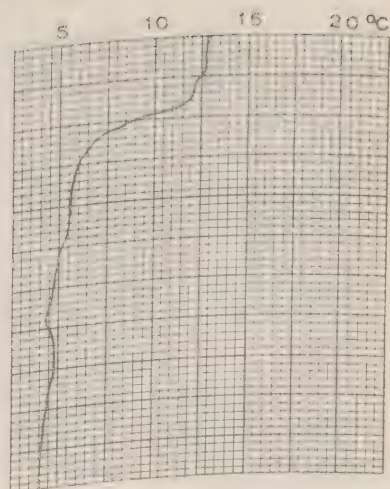
C.C.G.S. "Stonetown", Patrol No. 66



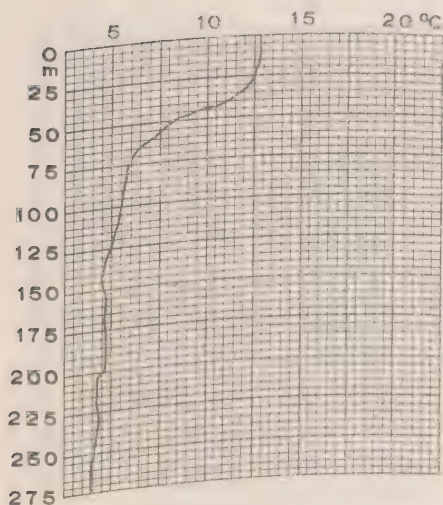
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 144°47'W



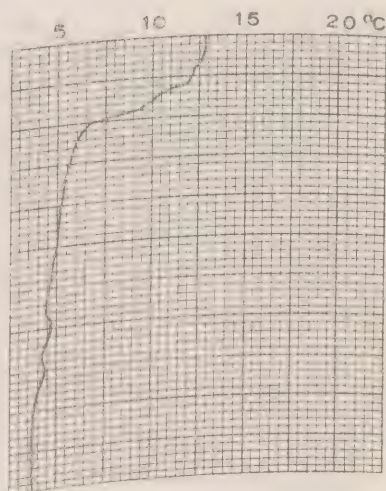
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 144°59'W



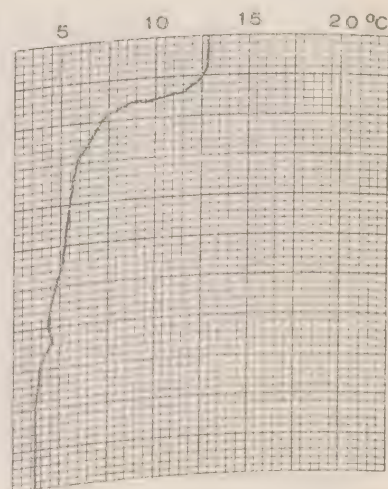
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 50°07'N
 144°58'W



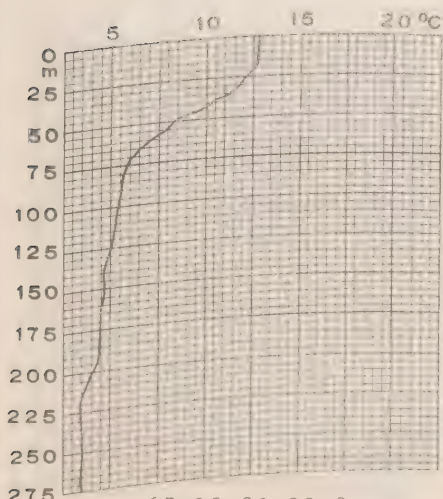
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 145°02'W



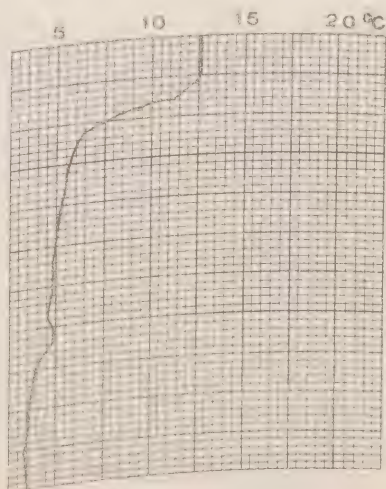
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 145°06'W



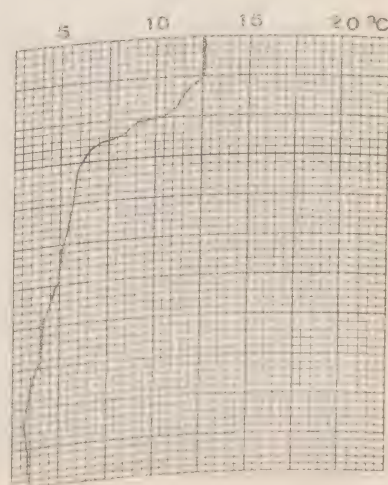
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 145°07'W



65-08-21-00.0
 50°07'N
 145°07'W

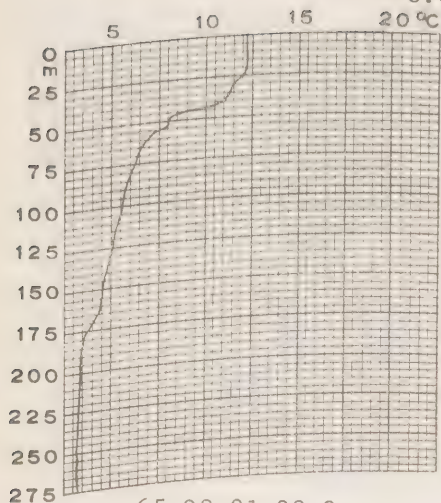


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 145°05'W

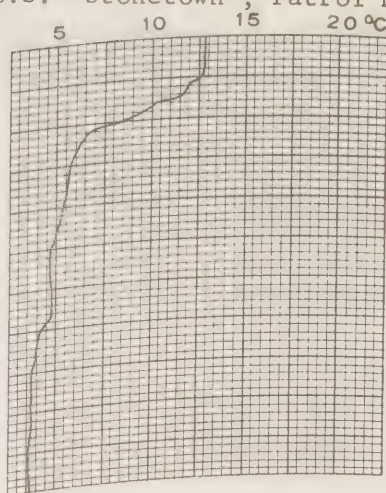


65-08-21-06.0
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 145°15'W

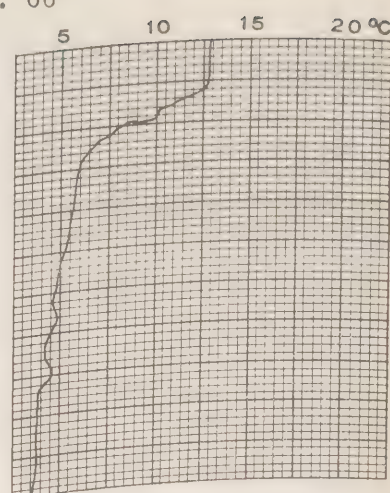
C.C.G.S. "Stonetown", Patrol No. 66



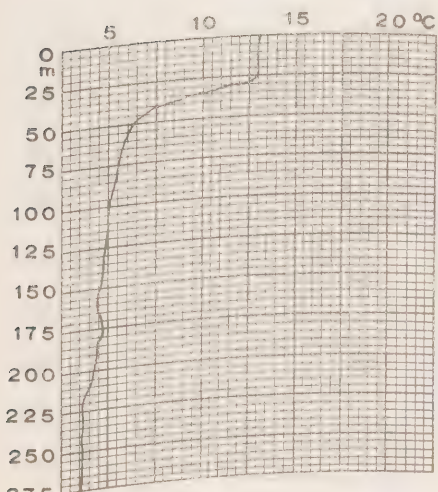
65-08-21-09.0
50°17'n
145°17'w



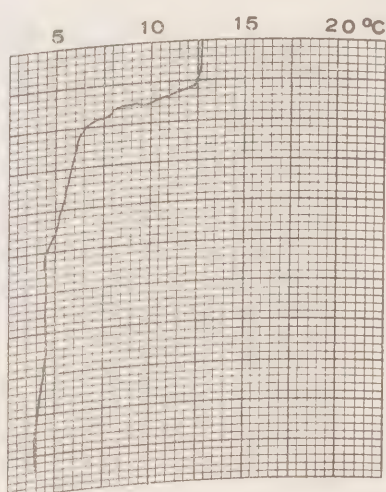
65-08-21-12.0
50°06'n
145°06'w



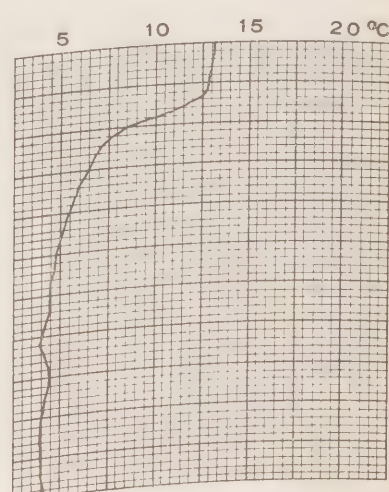
65-08-21-15.0
50°05'n
145°05'w



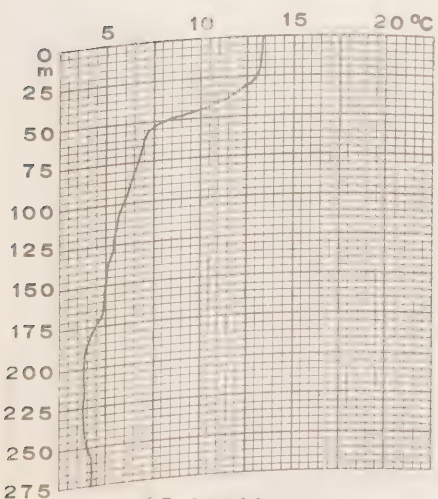
65-08-22-06.0
50°12'n
146°56'w



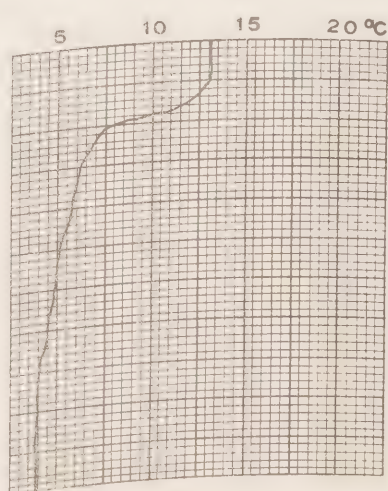
65-08-22-09.0
50°01'n
145°00'w



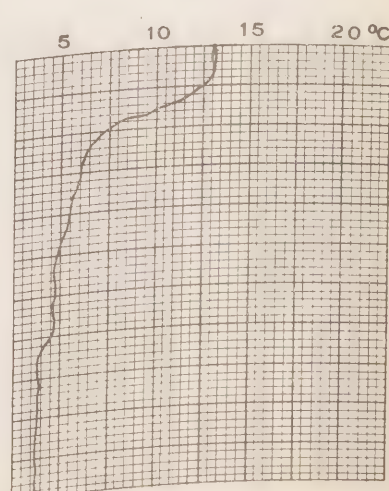
65-08-23-00.0
49°57'n
145°05'w



65-08-23-03.0
49°53'n
145°09'w

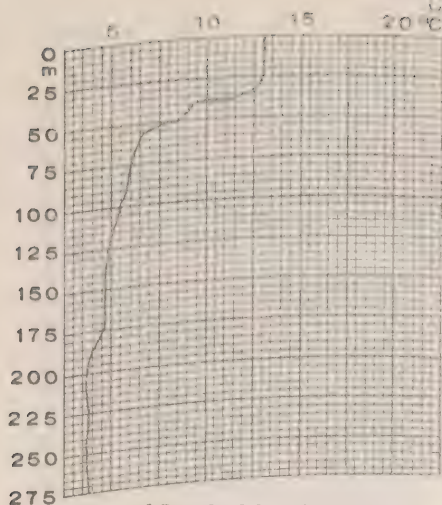


65-08-23-06.0
49°52'n
145°12'w

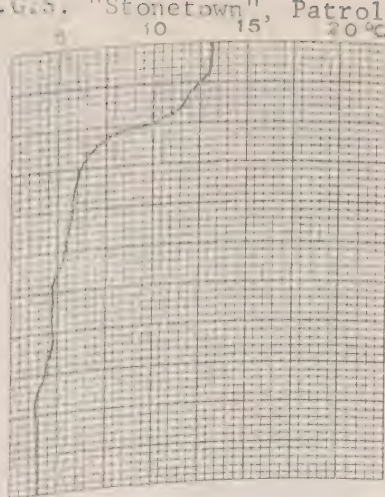


65-08-23-09.0
49°50'n
145°13'w

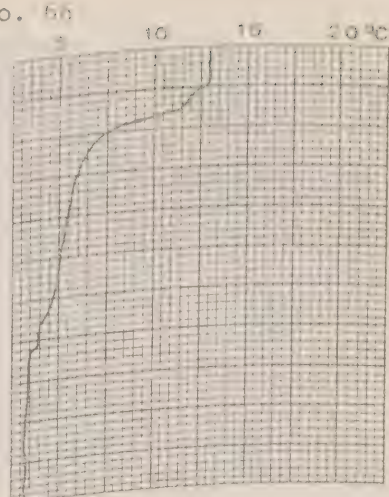
U.S.G.S. "Stonetown", Patrol No. 56



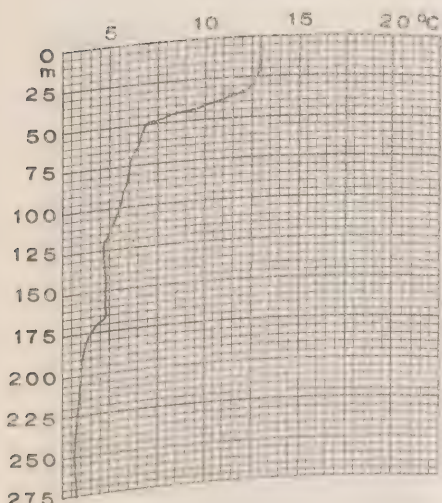
65-08-23-12.0
49°48'n
145°18'w



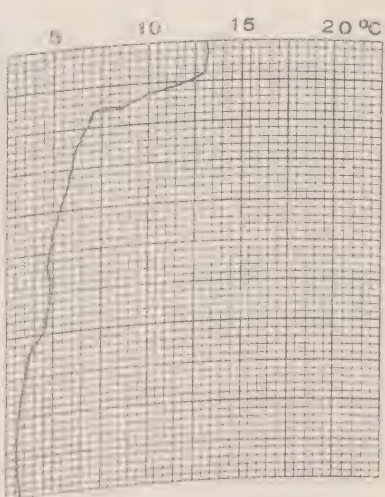
65-08-23-15.0
49°53'n
145°12'w



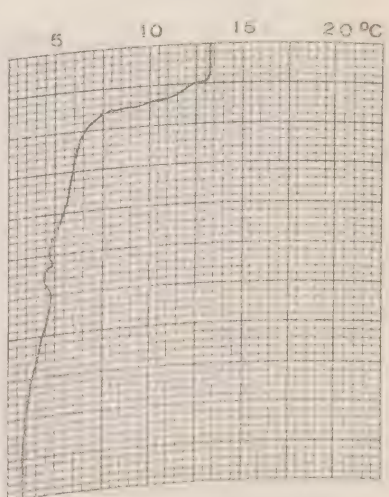
65-08-23-18.0
49°48'n
145°13'w



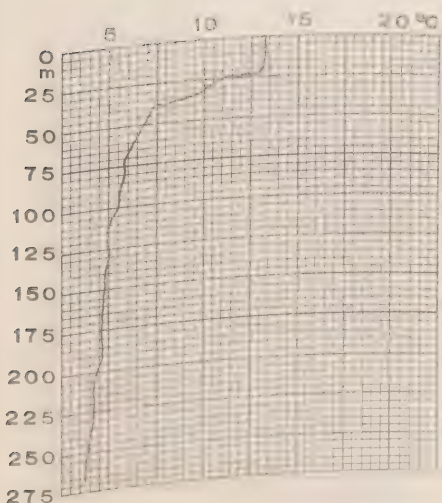
65-08-23-21.0
49°46'n
145°15'w



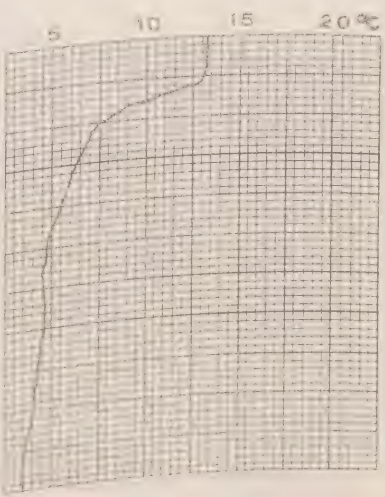
65-08-24-00.0
49°44'n
145°15'w



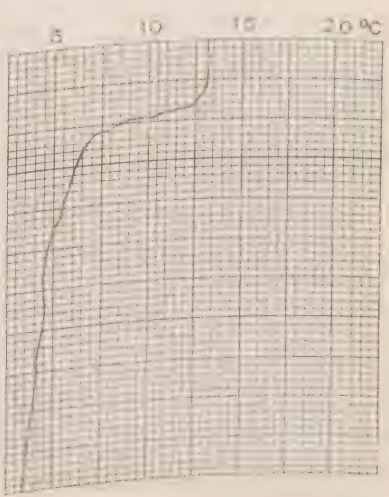
65-08-24-03.0
49°44'n
145°15'w



65-08-24-06.0
49°57'n
145°04'w

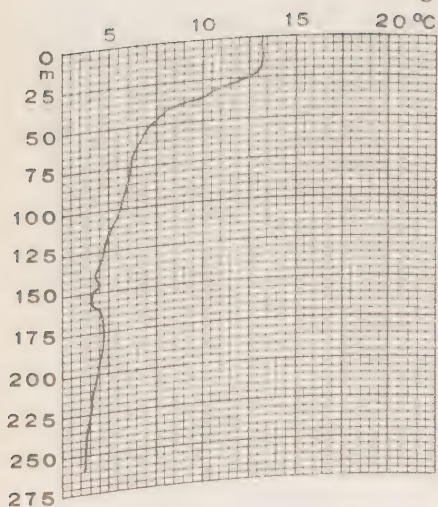


65-08-24-09.0
50°04'n
144°56'w

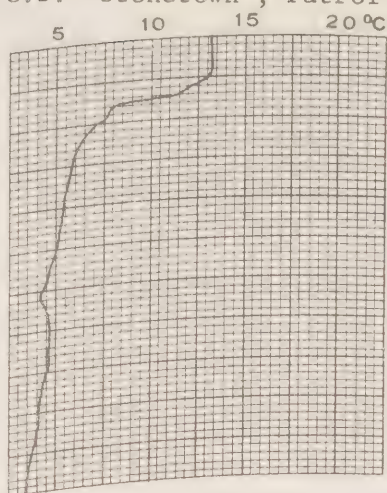


65-08-24-12.0
50°03'n
144°53'w

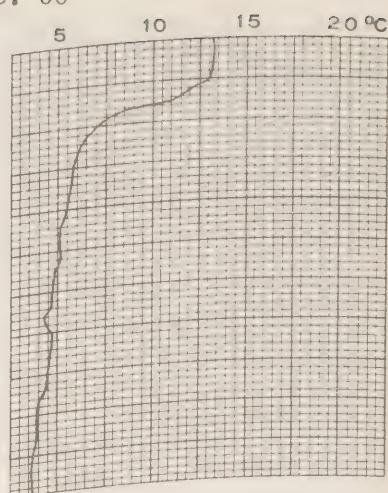
C.C.G.S. "Stonetown", Patrol No. 66



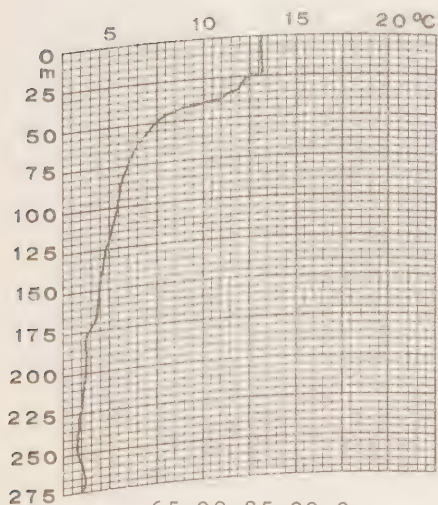
65-08-24-15.0
50°04'N
144°58'W



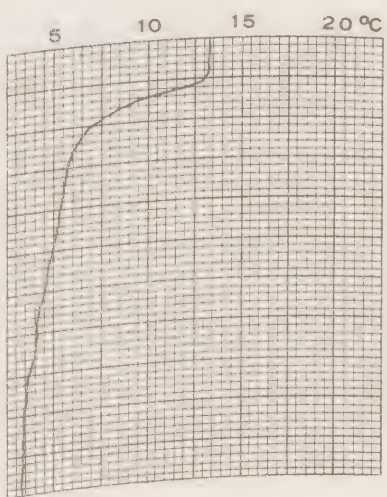
65-08-24-18.0
49°55'N
144°51'W



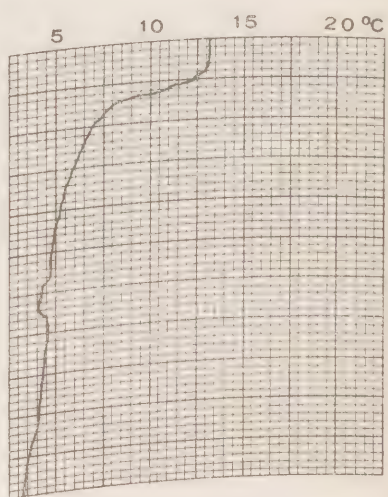
65-08-24-21.0
49°53'N
144°48'W



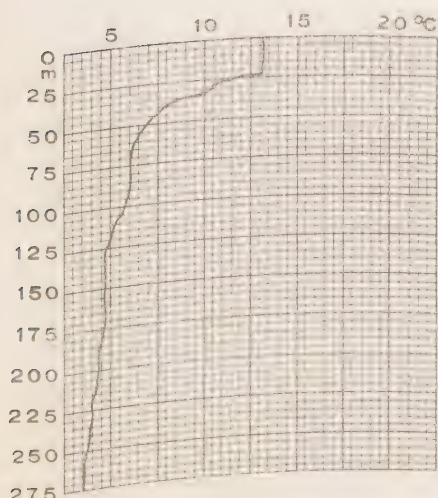
65-08-25-00.0
49°51'N
144°46'W



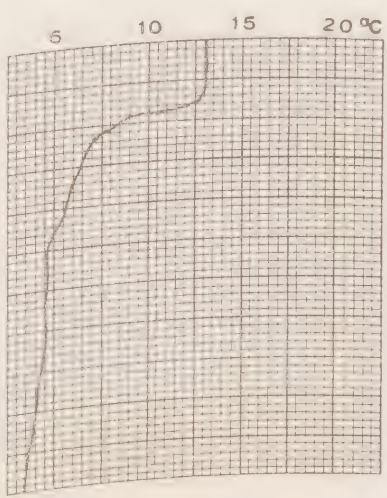
65-08-25-03.0
49°47'N
144°45'W



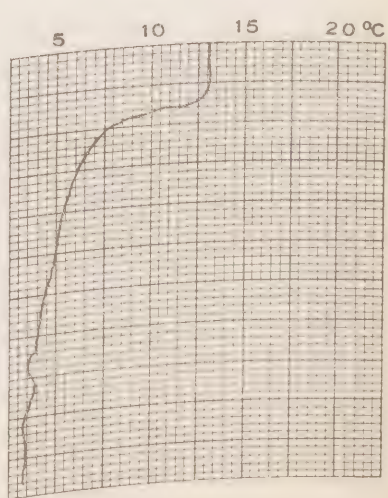
65-08-25-06.0
50°04'N
144°59'W



65-08-25-09.0
50°00'N
144°56'W

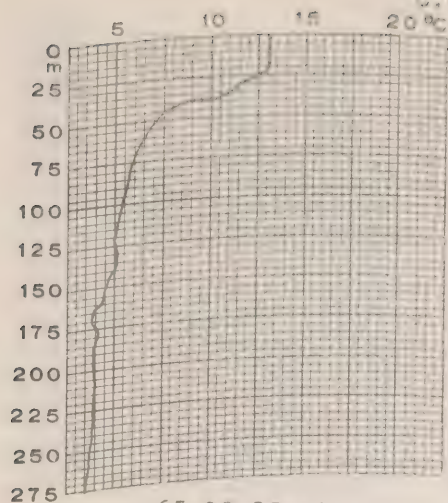


65-08-25-12.0
49°57'N
144°53'W

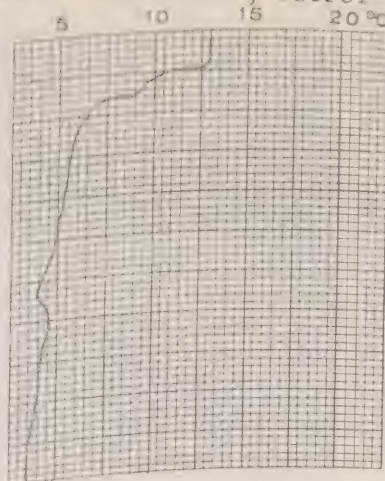


65-08-25-15.0
49°55'N
144°54'W

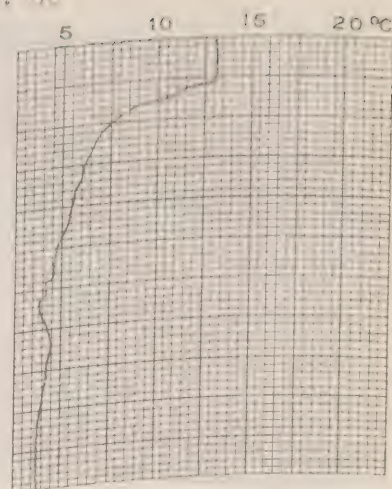
C.C.G.S. "Stonetown", Patrol No. 65



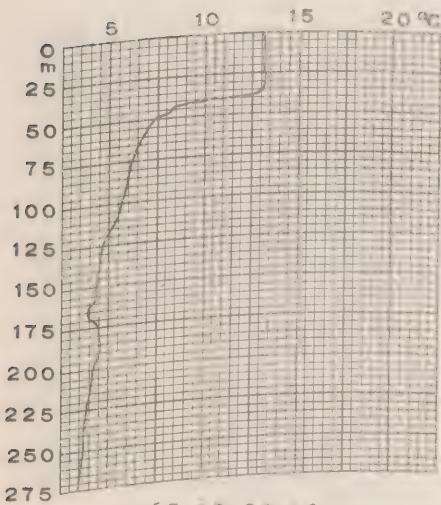
65-08-25-18.0
49°55'N
144°51'W



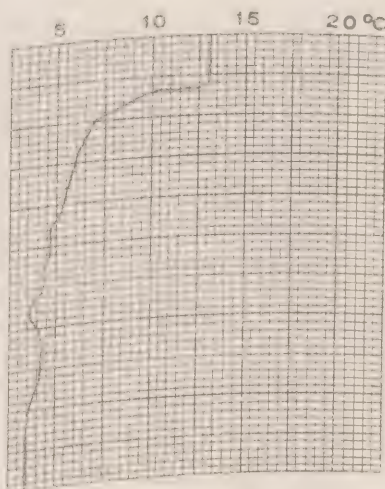
65-08-25-21.0
49°59'N
144°49'W



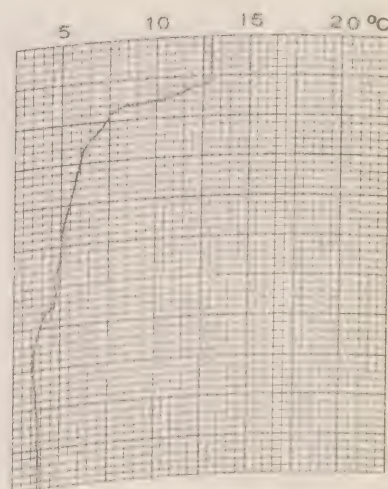
65-08-26-00.0
50°03'N
145°02'W



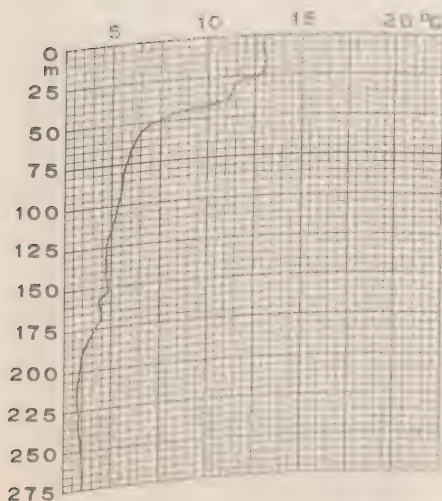
65-08-26-03.0
49°59'N
145°00'W



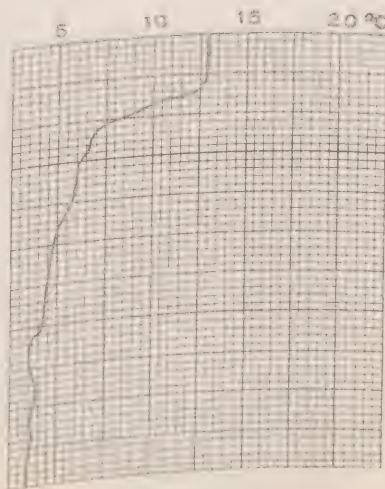
65-08-26-06.0
49°54'N
144°55'W



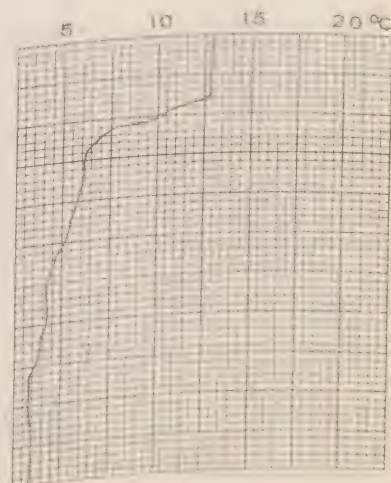
65-08-26-09.0
50°00'N
144°50'W



65-08-26-12.0
49°58'N
144°53'W

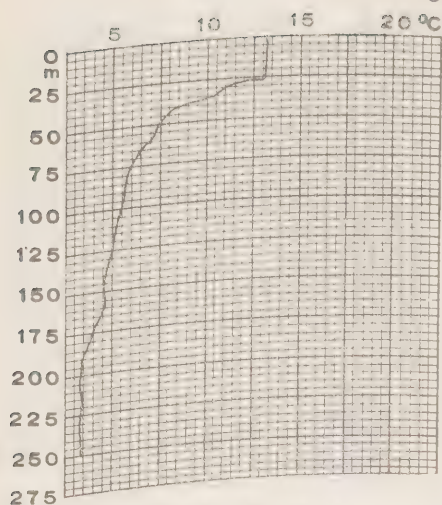


65-08-26-15.0
50°03'N
145°02'W

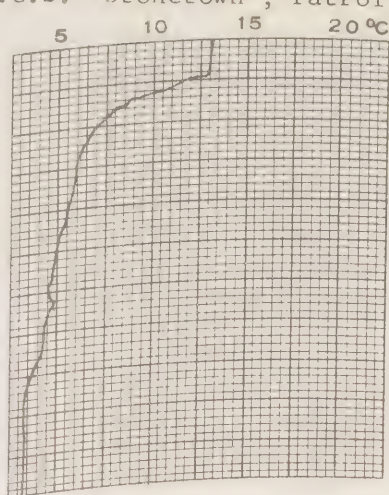


65-08-26-18.0
50°04'N
145°15'W

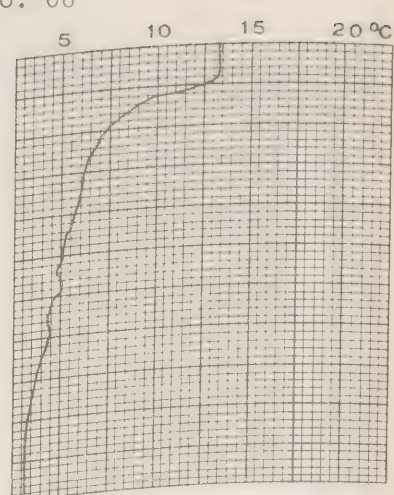
C.C.G.S. "Stonetown", Patrol No. 66



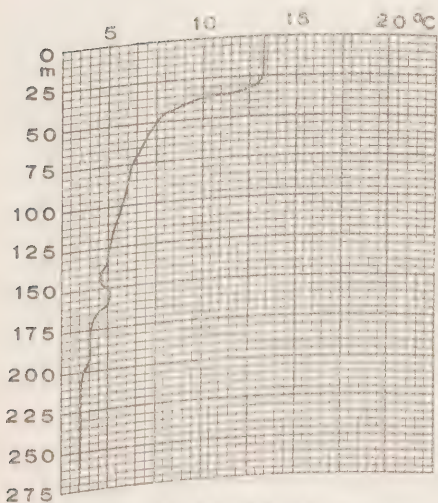
65-08-26-21.0
49°57'n
145°03'w



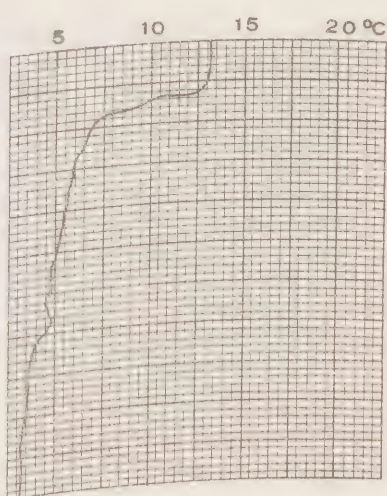
65-08-27-00.0
49°53'n
144°55'w



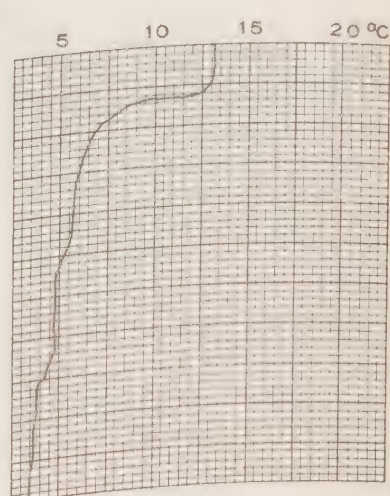
65-08-27-03.0
49°56'n
144°57'w



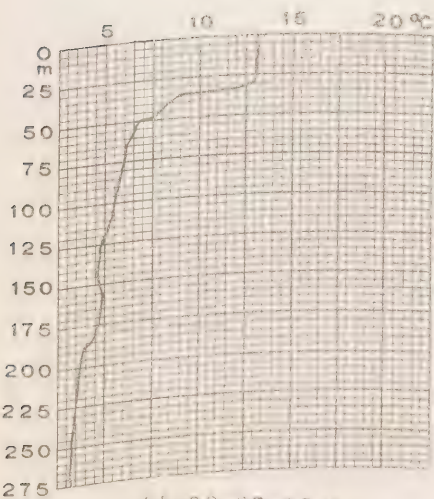
65-08-27-06.0
49°55'n
144°51'w



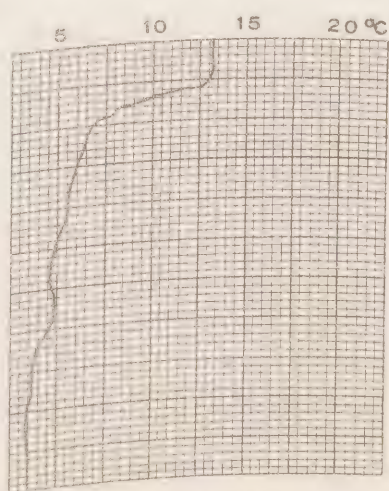
65-08-27-09.0
49°53'n
144°49'w



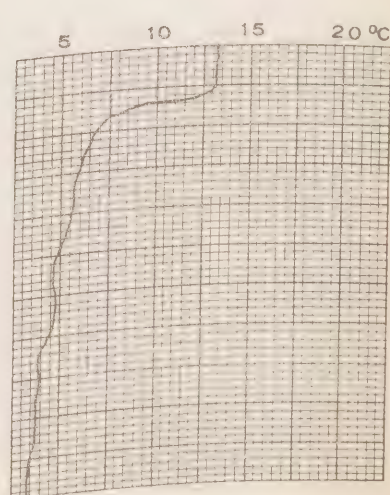
65-08-27-12.0
49°51'n
144°43'w



65-08-27-13.0
49°57'n
144°44'w

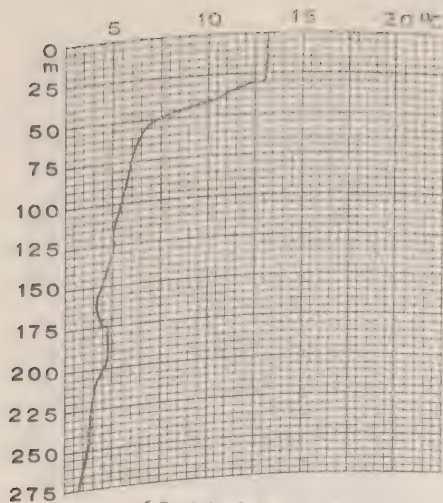


65-08-27-18.0
49°52'n
144°44'w

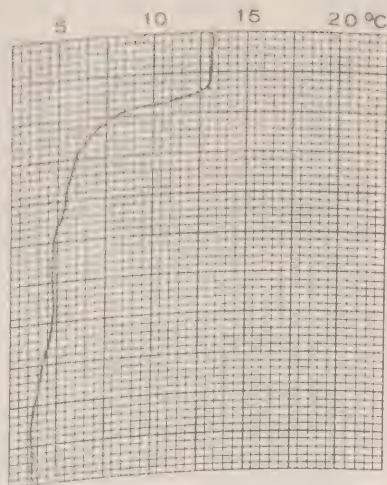


65-08-27-21.0
49°55'n
144°43'w

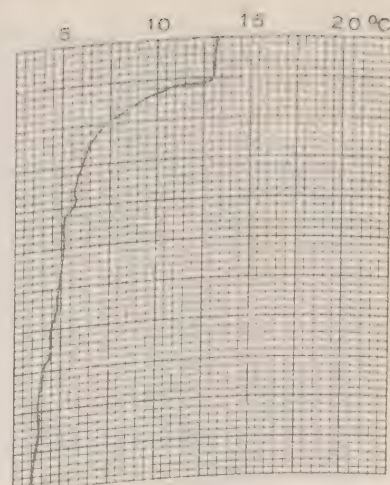
C.C.G.S. "Stonetown", Patrol No. 66



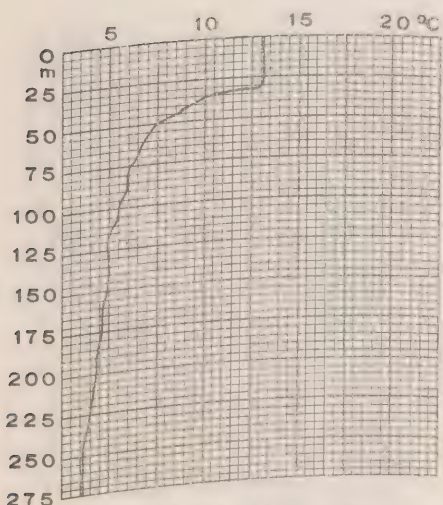
65-08-28-00.0
49°58'N
144°40'W



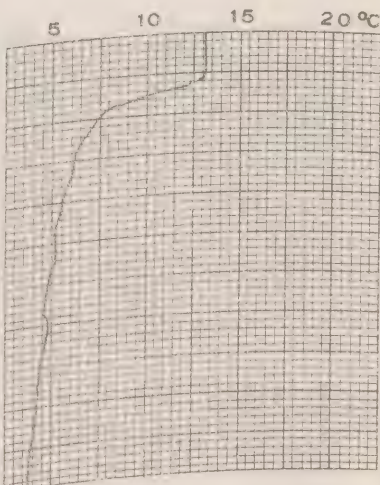
65-08-28-03.0
50°00'N
144°36'W



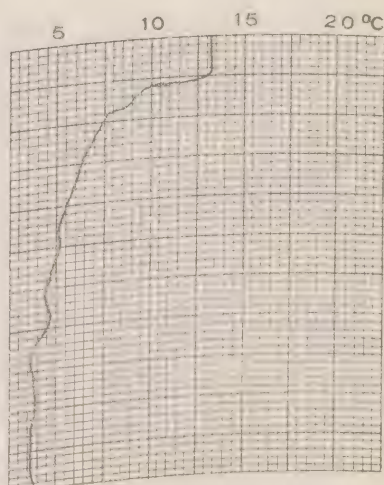
65-08-28-06.0
49°59'N
144°35'W



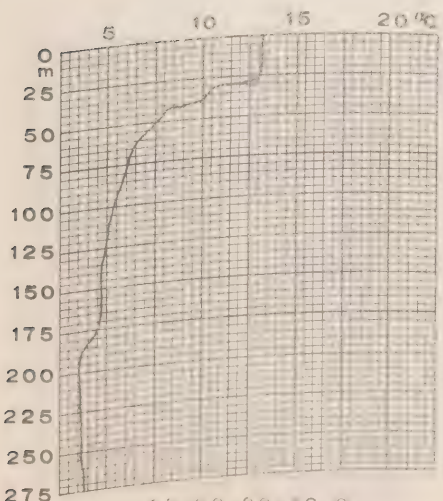
65-08-28-09.0
50°03'N
144°32'W



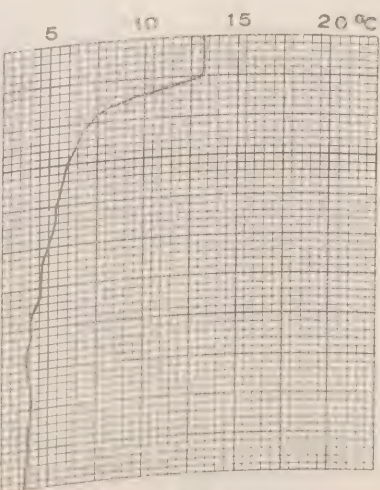
65-08-28-12.0
50°02'N
144°43'W



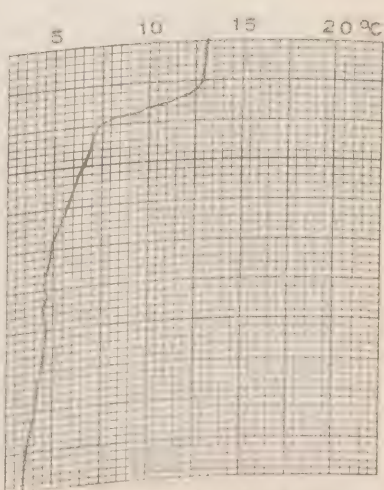
65-08-28-15.0
50°02'N
144°03'W



65-08-28-18.0
50°04'N
145°04'W

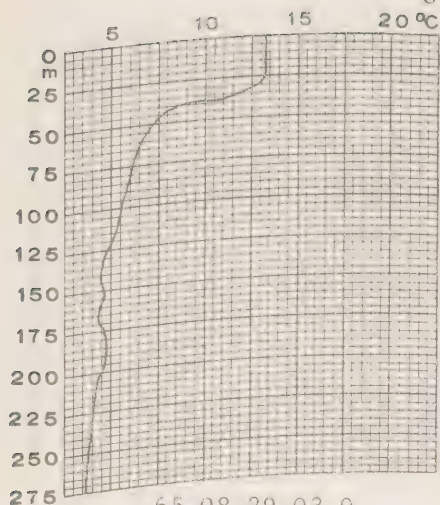


65-08-28-21.0
50°07'N
144°58'W



65-08-29-00.0
50°09'N
144°55'W

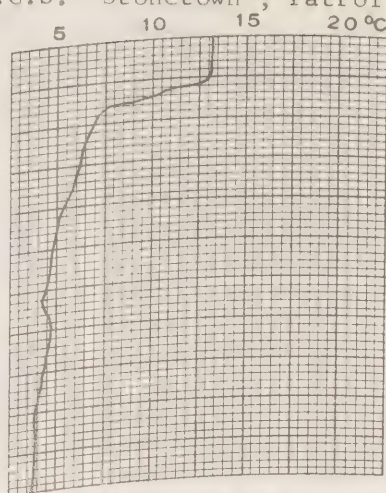
C.C.G.S. "Stonetown", Patrol No. 66



65-08-29-03.0

50°09'N

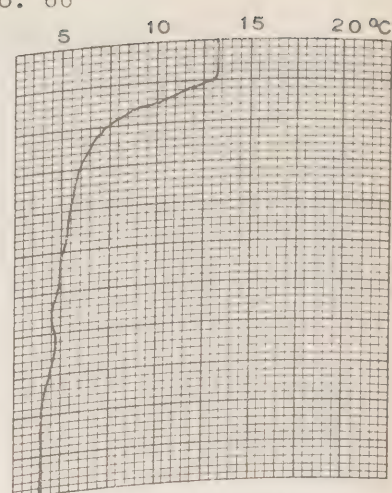
144°55'W



65-08-29-06.0

50°15'N

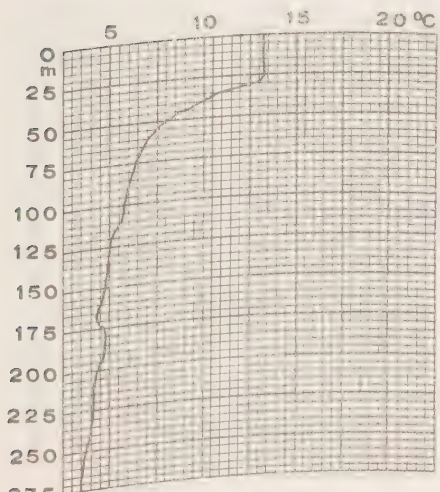
144°52'W



65-08-29-09.0

50°19'N

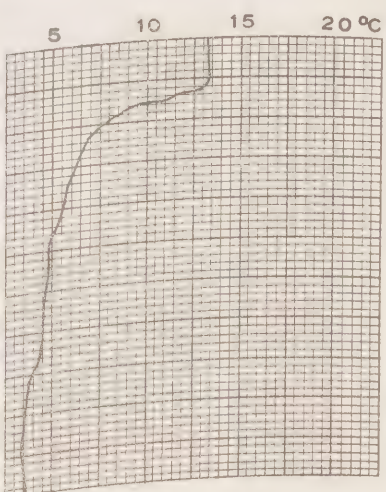
144°49'W



65-08-29-12.0

50°11'N

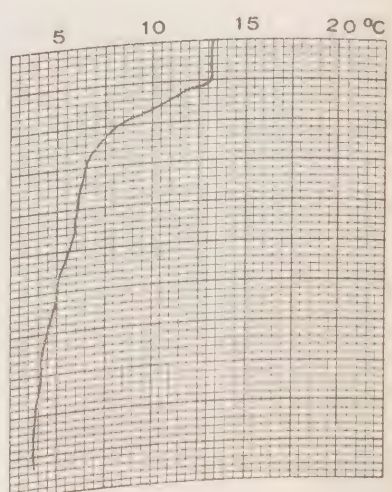
144°55'W



65-08-29-15.0

50°02'N

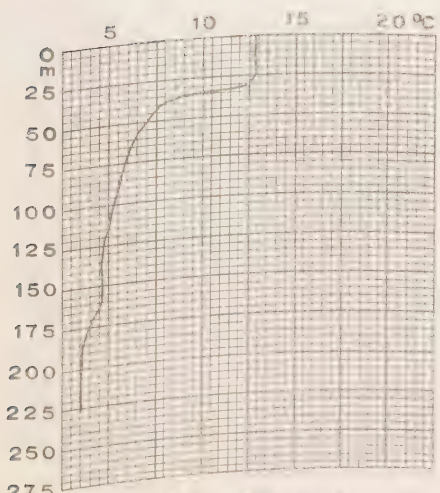
144°58'W



65-08-29-18.0

49°40'N

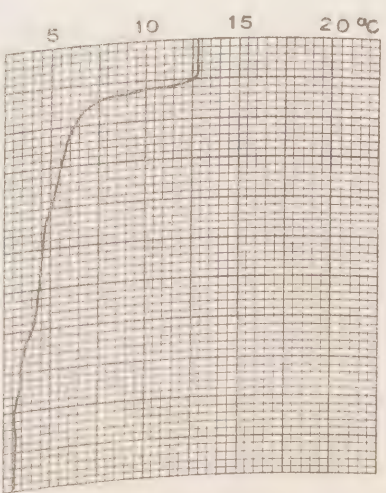
145°23'W



65-08-29-21.0

49°50'N

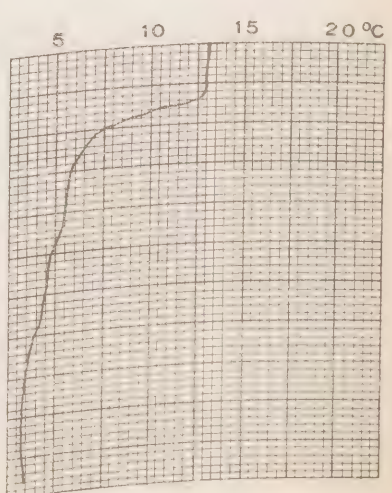
145°12'W



65-08-20-00.0

50°01'N

145°00'W

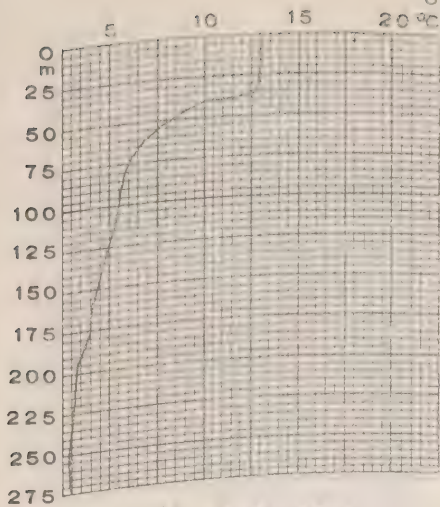


65-08-30-03.0

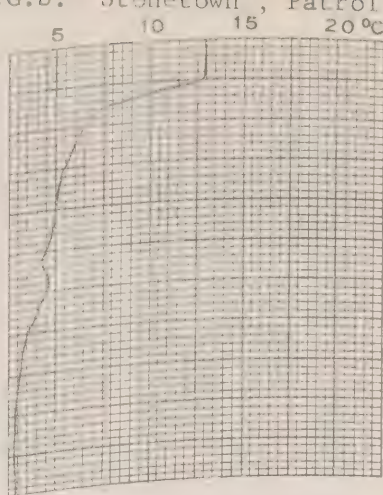
50°00'N

144°57'W

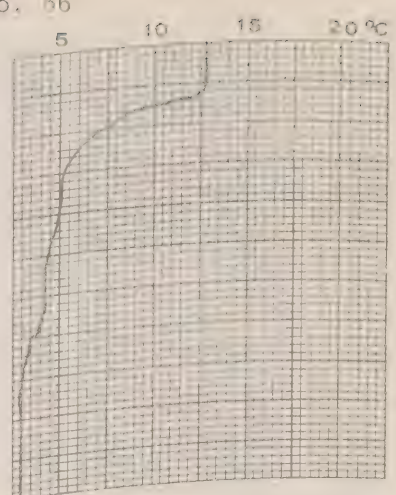
C.C.G.S. "Stonetown", Patrol No. 66



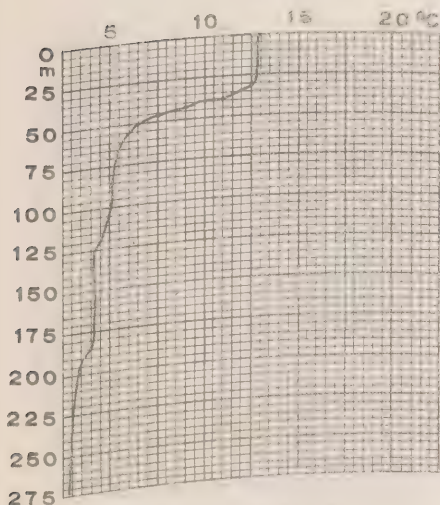
65-08-30-06.0
50°02'N
144°53'W



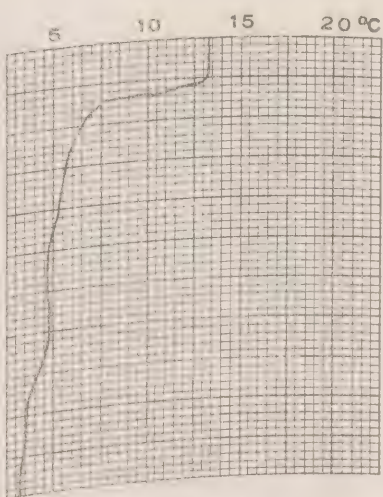
65-08-30-09.0
50°05'N
144°49'W



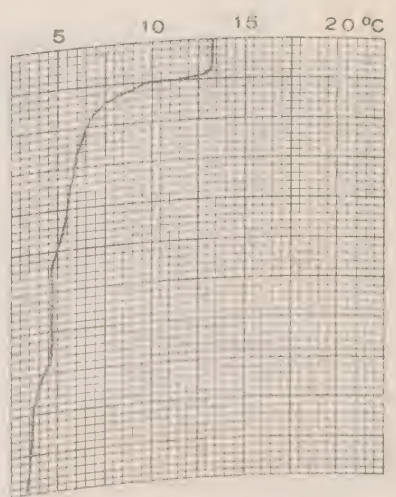
65-08-30-12.0
50°06'N
144°45'W



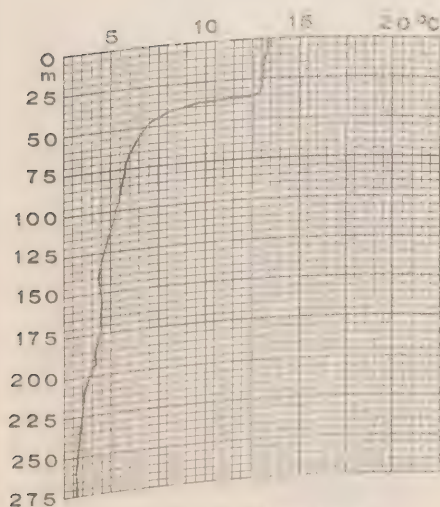
65-08-30-15.0
50°01'N
144°42'W



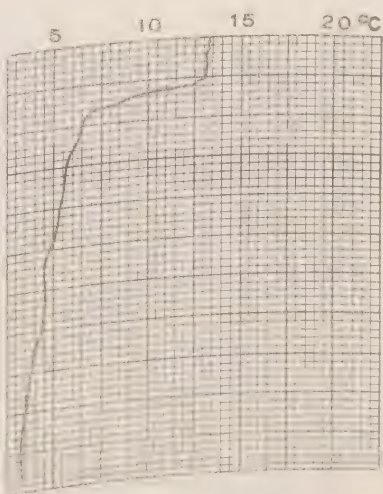
65-08-31-18.0
49°57'N
144°43'W



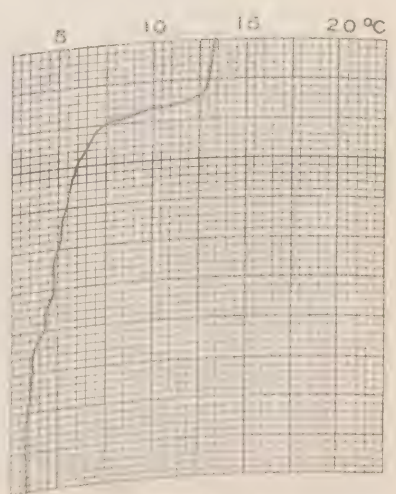
65-08-31-21.0
49°58'N
144°42'W



65-09-01-00.0
49°59'N
144°37'W

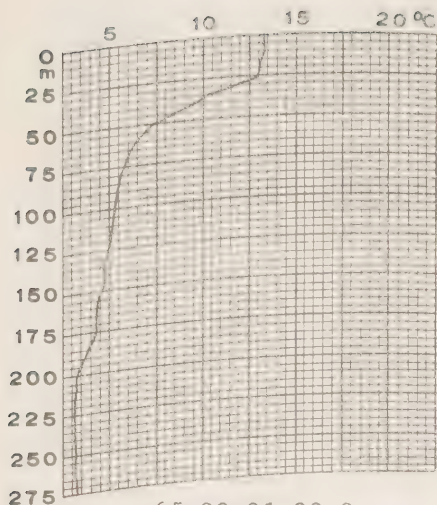


65-09-01-03.0
49°59'N
144°35'W

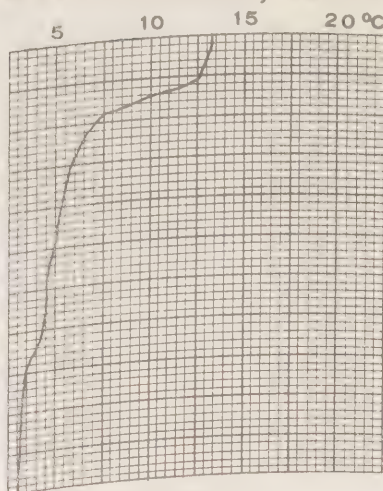


65-09-01-06.0
49°58'N
145°04'W

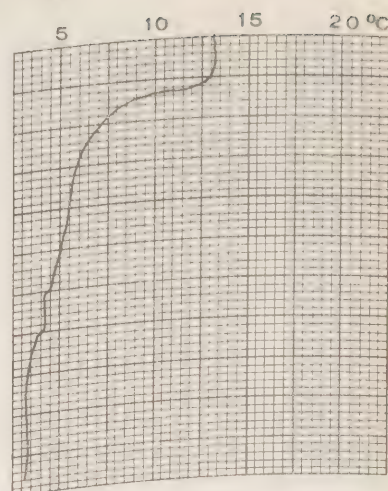
C.C.G.S. "Stonetown", Patrol No. 66



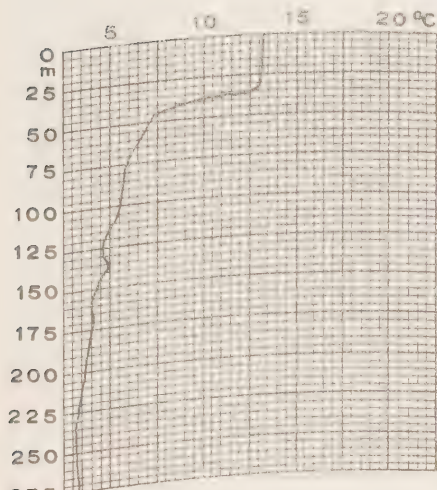
65-09-01-09.0
50°00'N
145°04'W



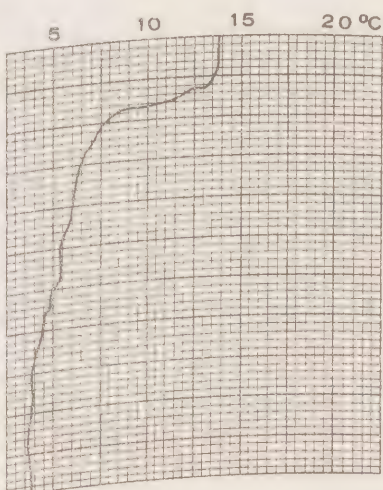
65-09-01-12.0
50°00'N
145°06'W



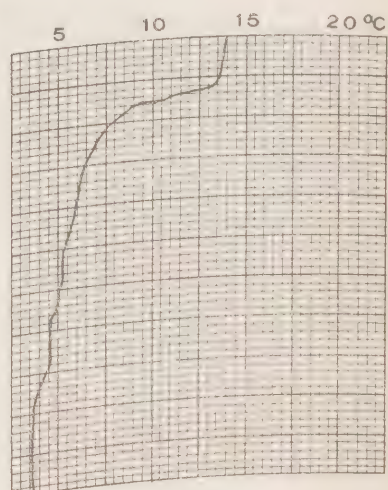
65-09-01-15.0
49°57'N
145°04'W



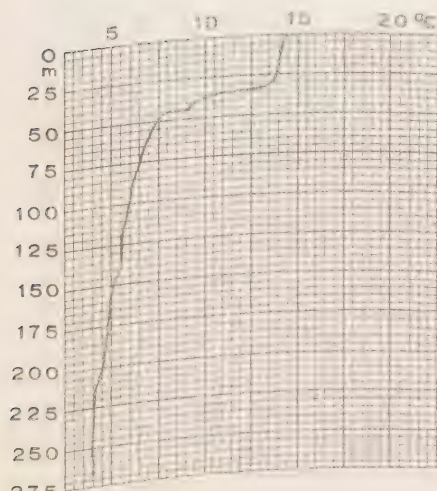
65-09-01-18.0
49°56'N
145°03'W



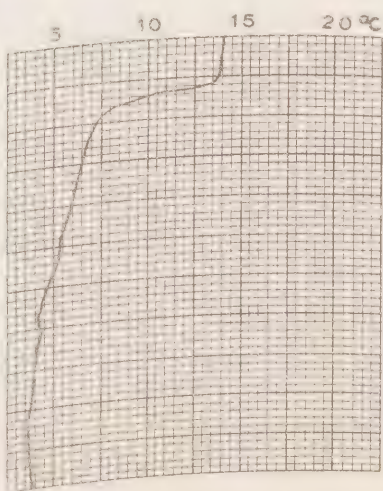
65-09-01-21.0
49°56'N
145°03'W



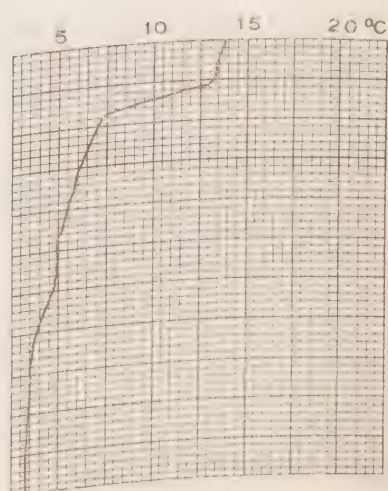
65-09-02-00.0
49°55'N
145°00'W



65-09-02-03.0
49°57'N
145°00'W

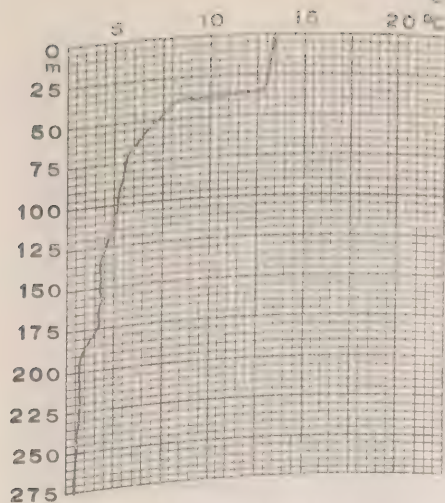


65-09-02-06.0
49°56'N
144°59'W

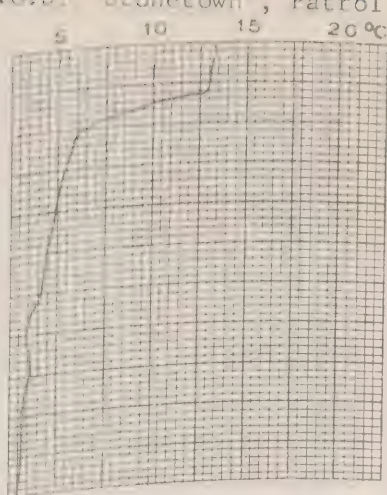


65-09-02-09.0
49°57'N
144°57'W

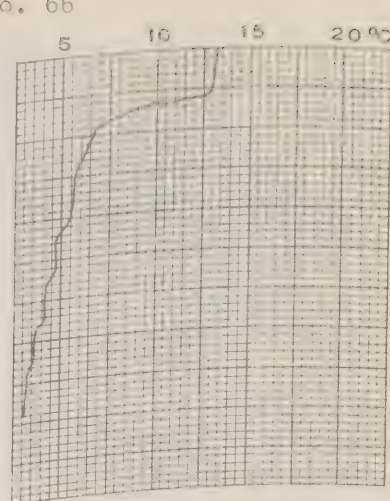
C.C.G.S. "Stonetown", Patrol No. 66



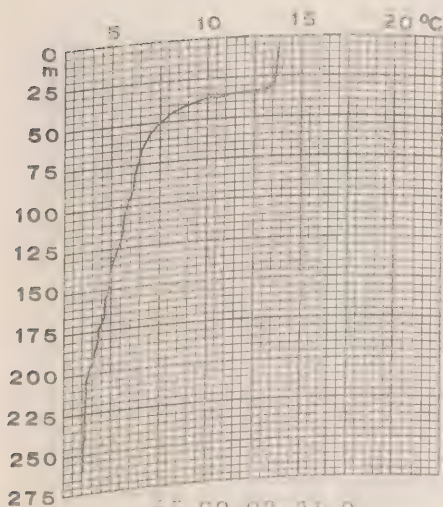
65-09-02-12.0
 50°00'N
 144°55'W



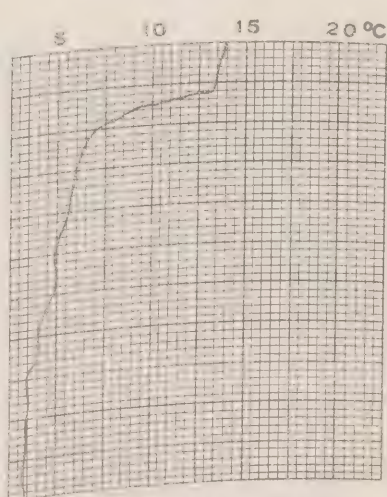
65-09-02-15.0
 49°55'N
 145°00'W



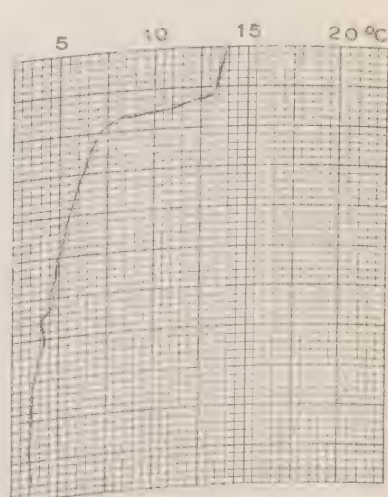
65-09-02-18.0
 49°56'N
 144°59'W



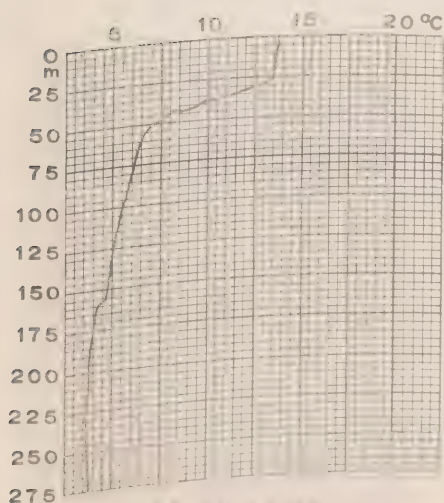
65-09-02-21.0
 49°57'N
 145°00'W



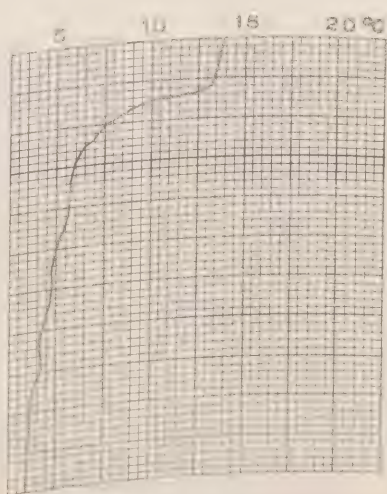
65-09-03-00.0
 49°57'N
 145°00'W



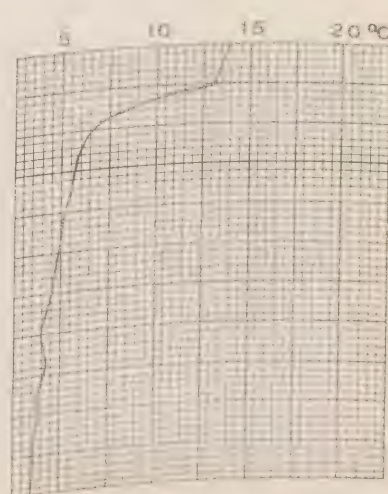
65-09-03-03.0
 49°57'N
 144°55'W



65-09-03-06.0
 49°54'N
 144°50'W

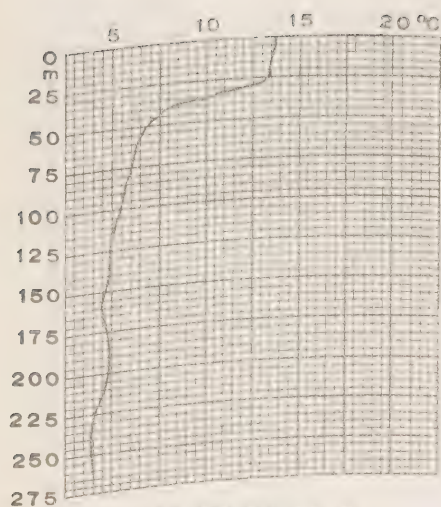


65-09-03-09.0
 49°52'N
 144°48'W

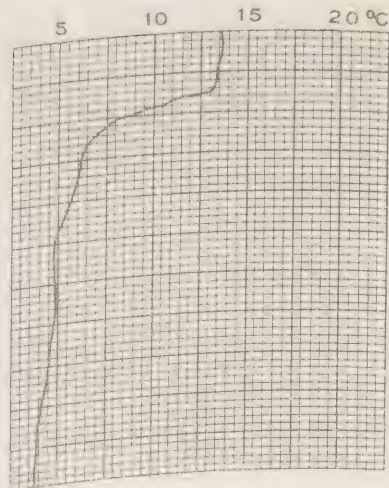


65-09-03-12.0
 49°48'N
 144°45'W

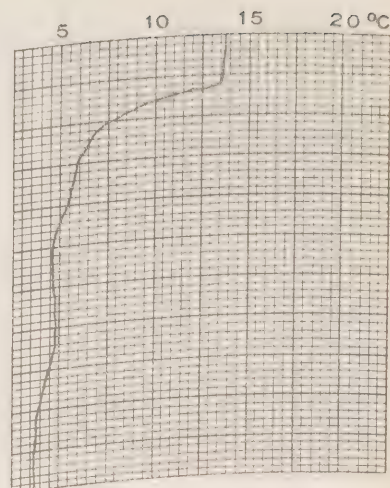
C.C.G.S. "Stonetown", Patrol No. 66



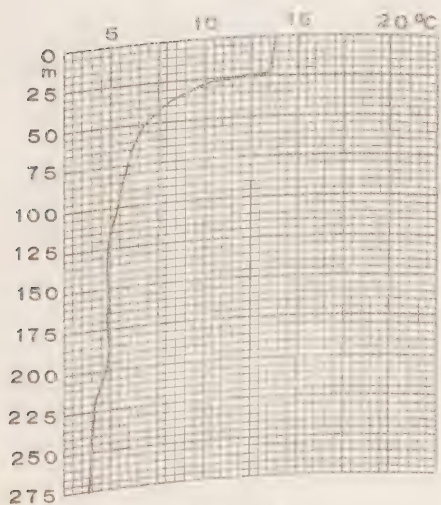
65-09-03-15.0
49°52'N
144°50'W



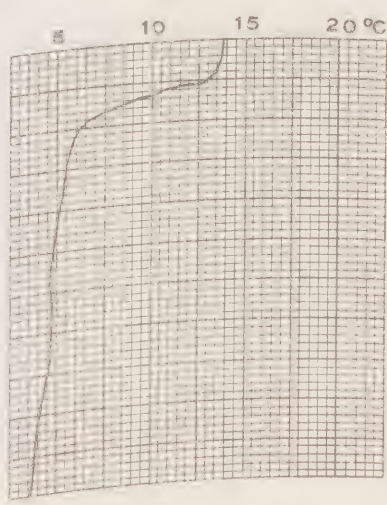
65-09-03-18.0
49°54'N
144°44'W



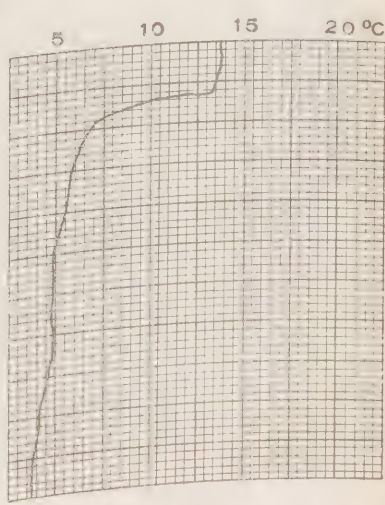
65-09-03-21.0
49°53'N
144°42'W



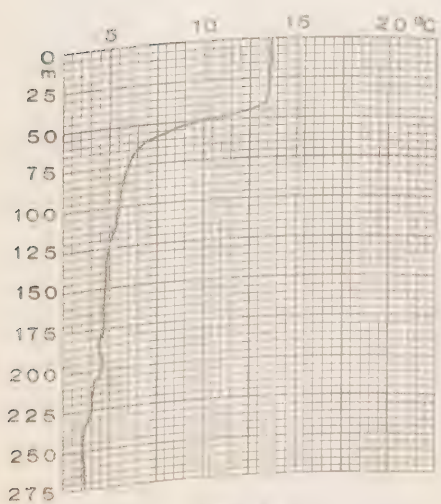
65-09-04-00.0
49°54'N
144°37'W



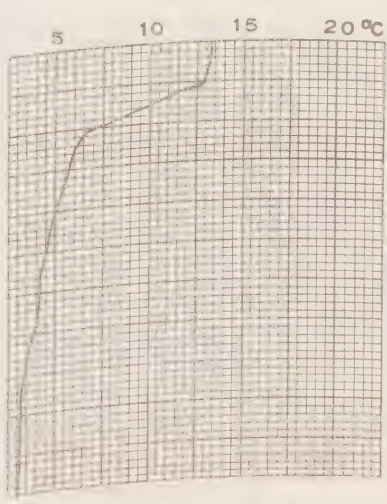
65-09-04-03.0
49°52'N
144°40'W



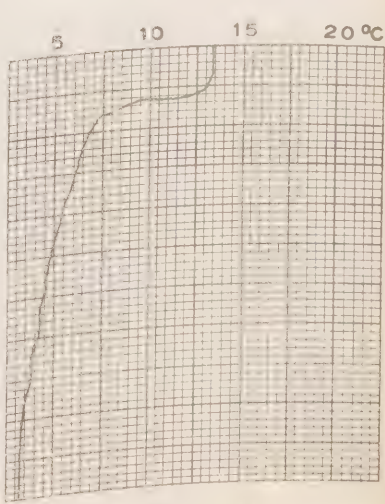
65-09-04-06.0
49°57'N
144°34'W



65-09-04-09.0
49°56'N
144°35'W

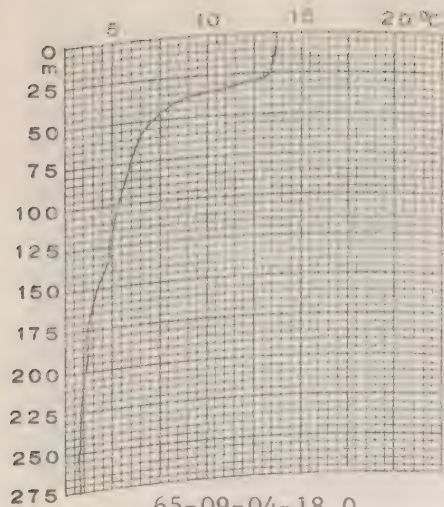


65-09-04-12.0
49°59'N
145°01'W

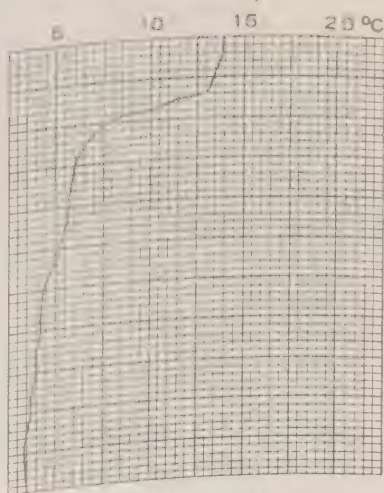


65-09-04-15.0
50°00'N
145°06'W

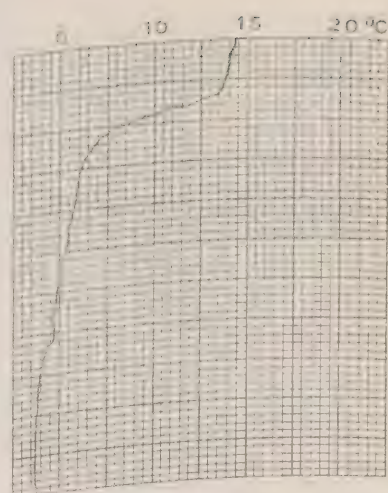
C.C.G.S. "Stonetown", Patrol No. 66



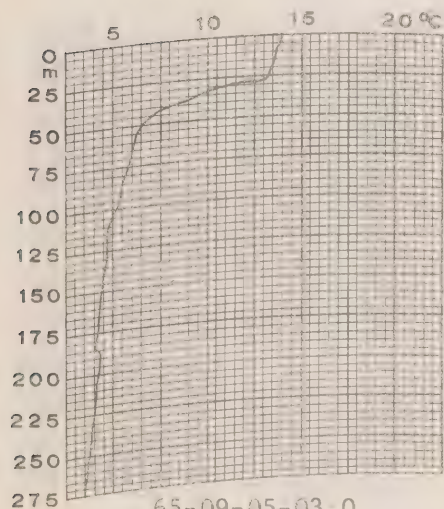
65-09-04-18.0
50°00'N
145°01'W



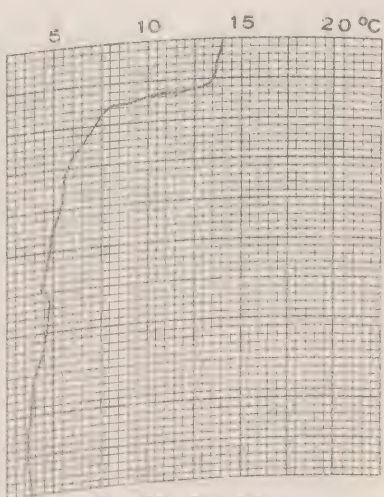
65-09-04-21.0
50°00'N
145°00'W



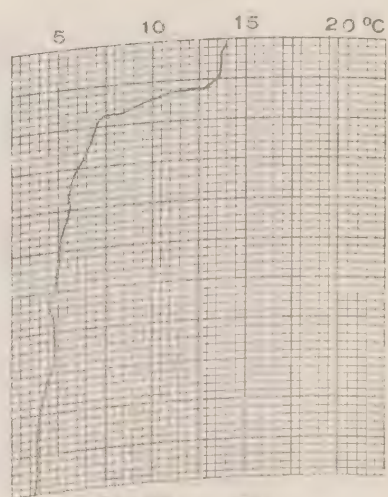
65-09-05-00.0
49°57'N
144°53'W



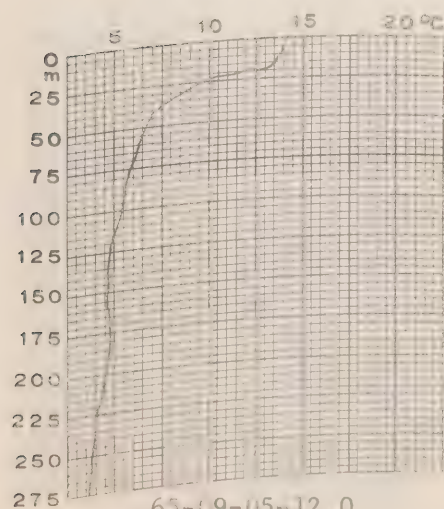
65-09-05-03.0
49°58'N
144°50'W



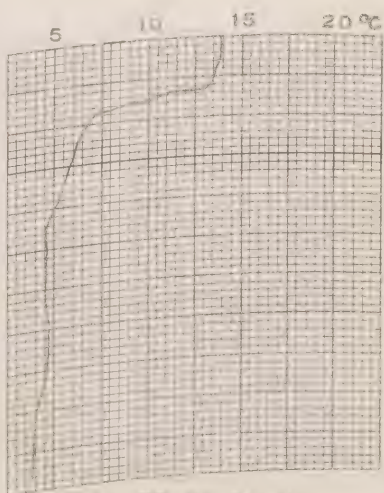
65-09-05-06.0
49°51'N
144°46'W



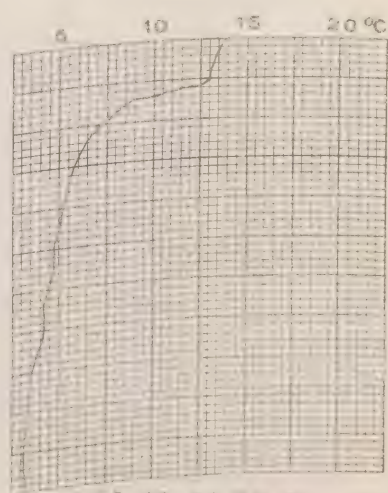
65-09-05-09.0
49°54'N
144°47'W



65-09-05-12.0
49°53'N
144°40'W

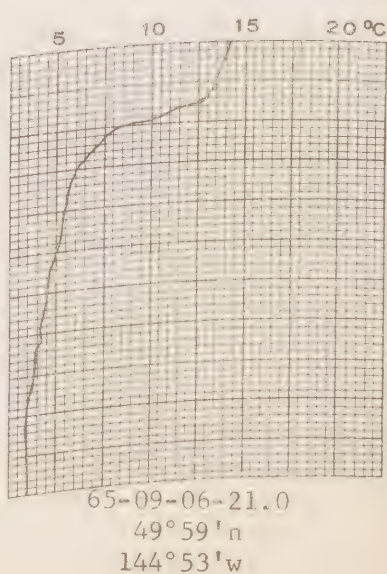
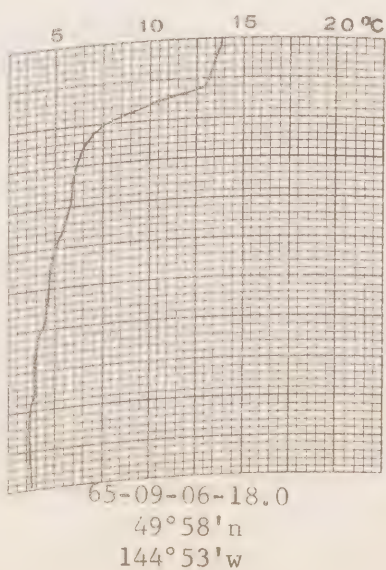
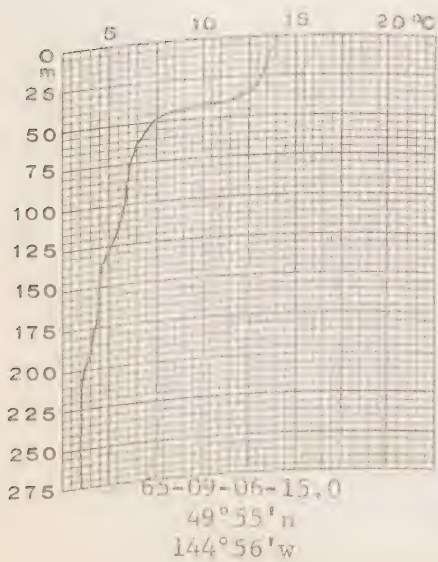
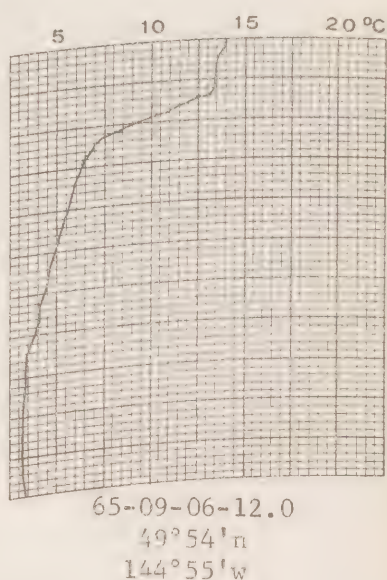
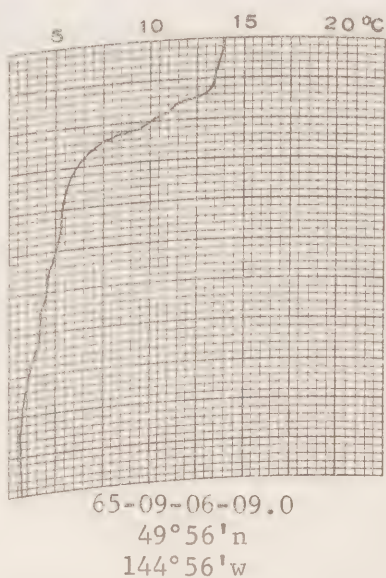
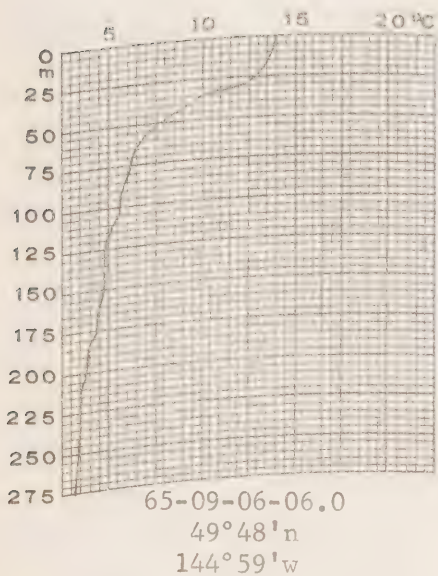
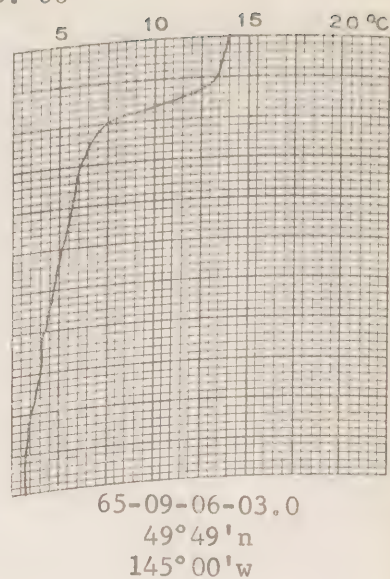
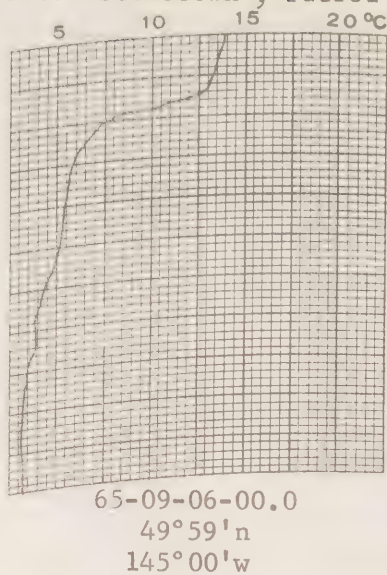
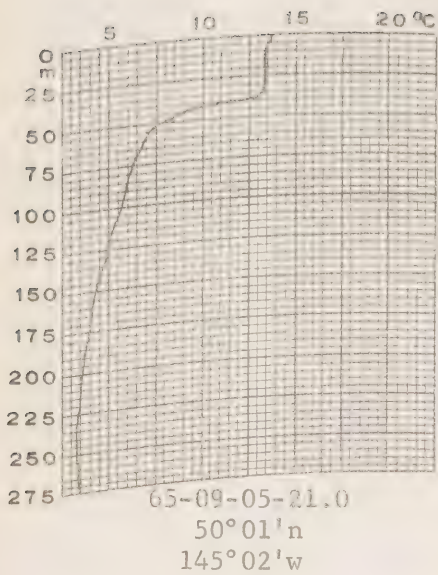


65-09-05-15.0
49°53'N
144°43'W

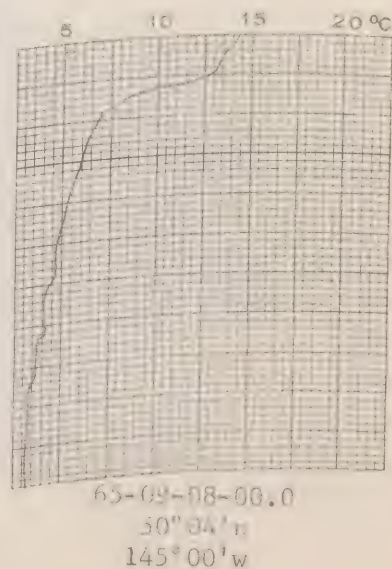
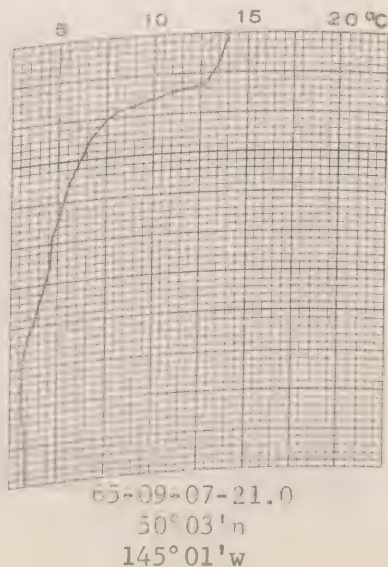
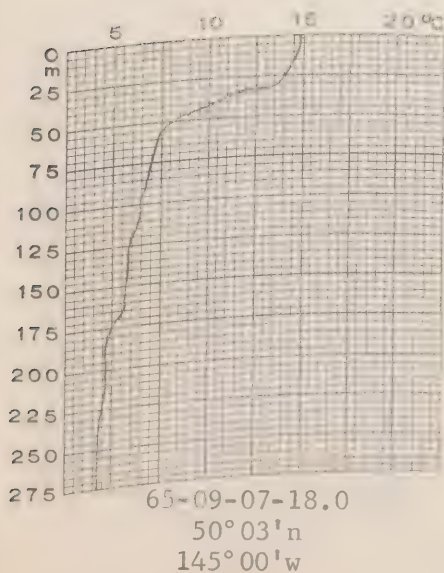
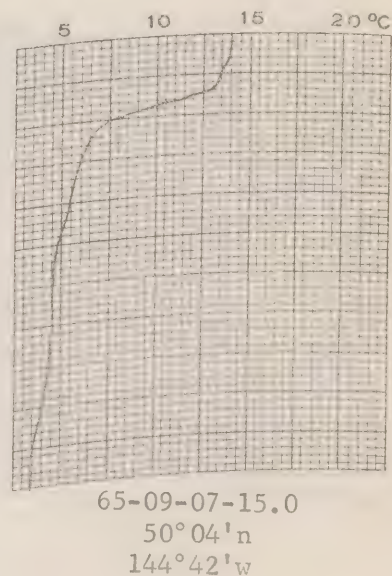
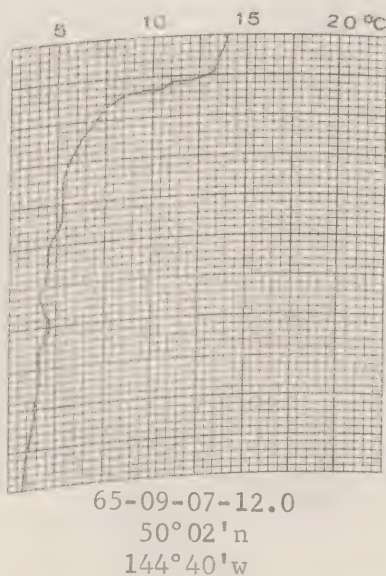
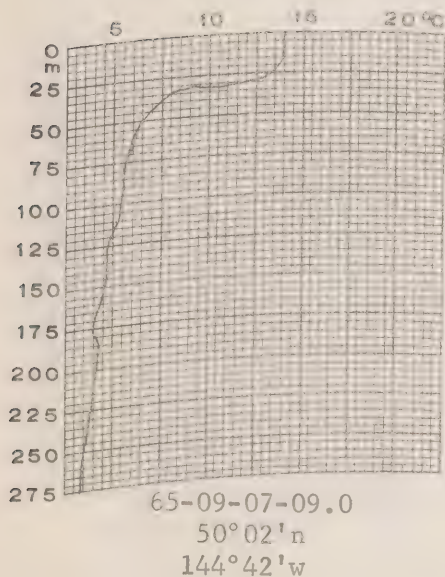
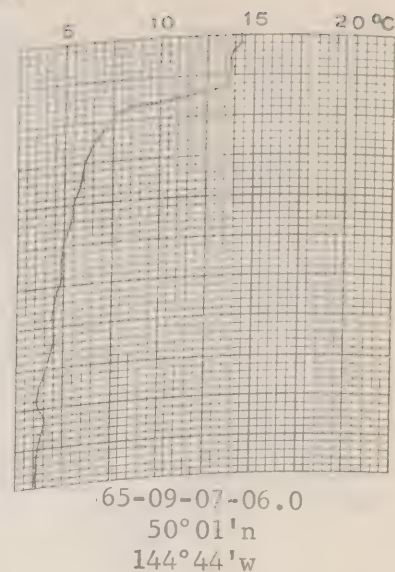
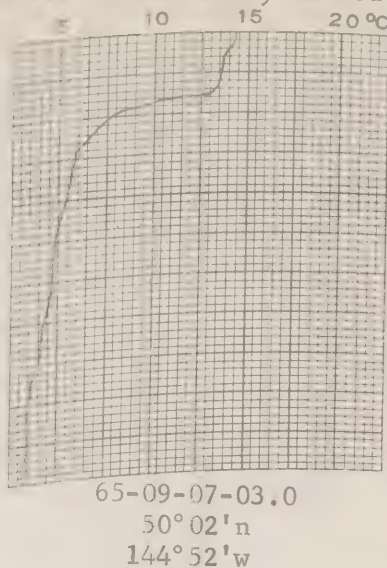
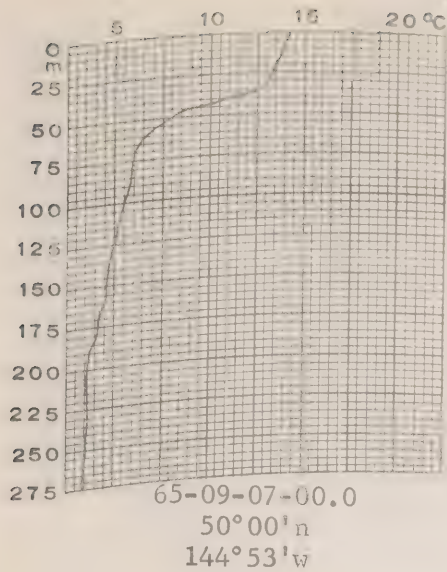


65-09-05-18.0
50°04'N
145°03'W

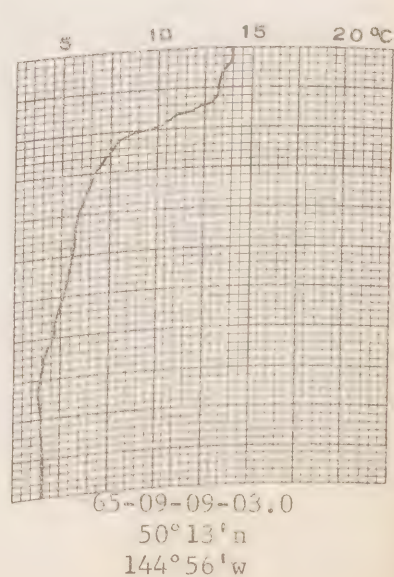
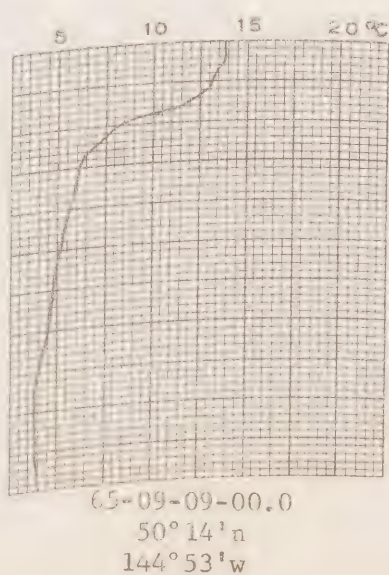
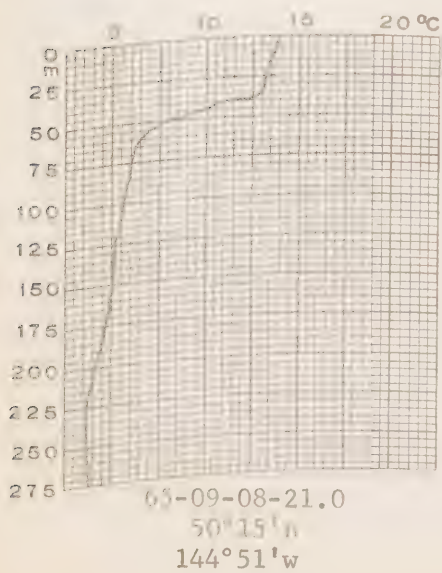
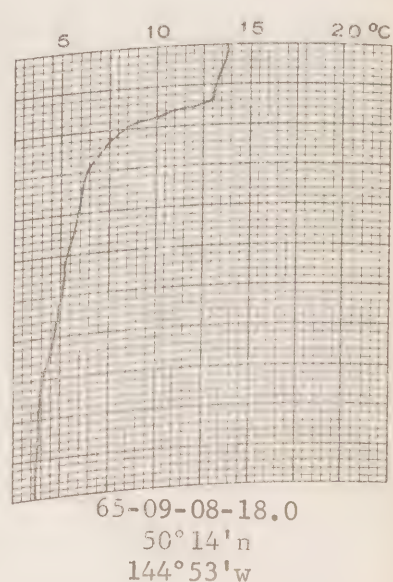
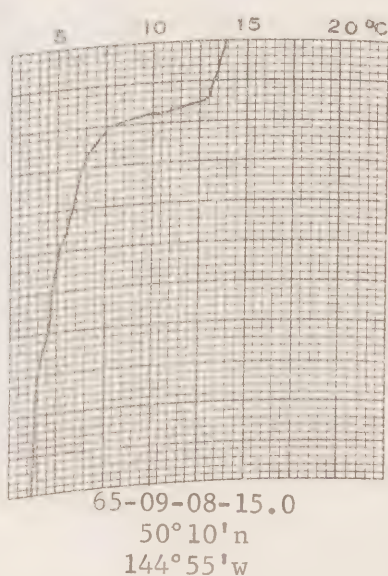
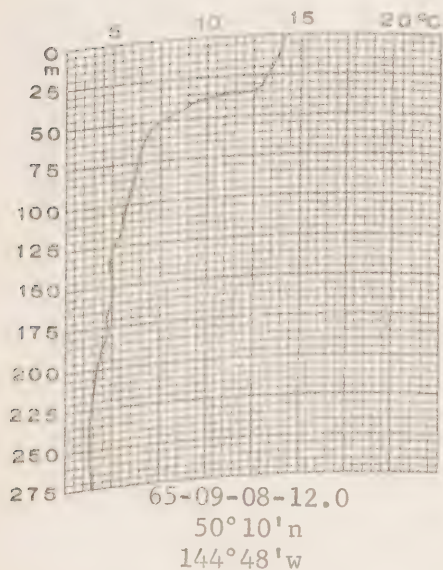
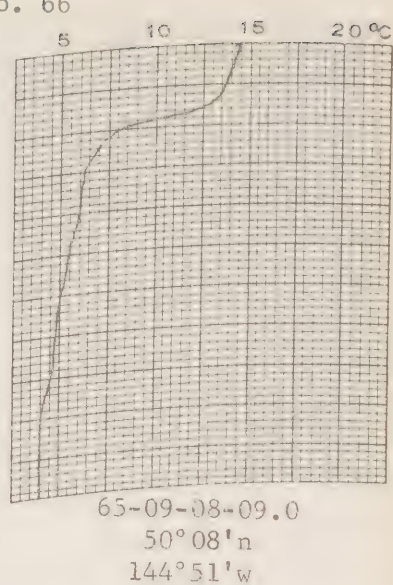
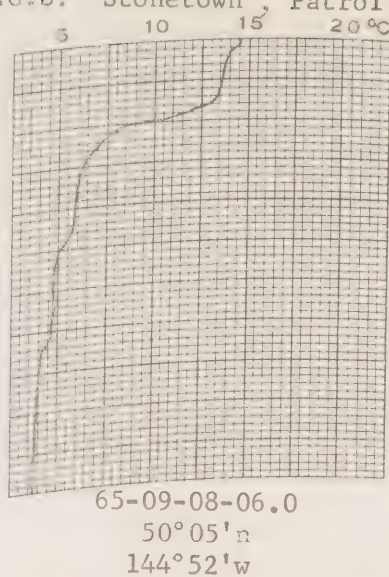
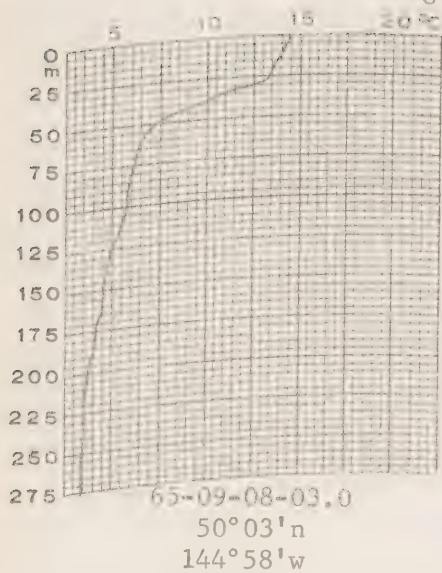
C.C.G.S. "Stonetown", Patrol No. 66



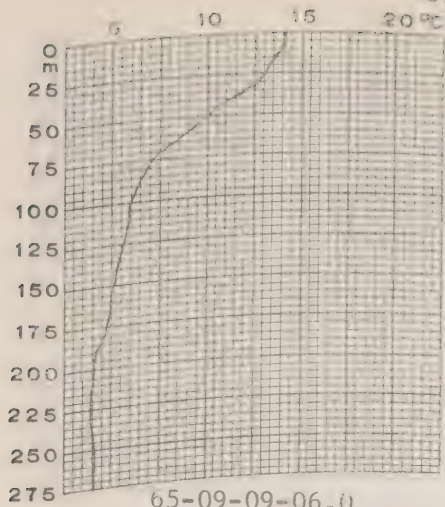
C.C.G.S. "Stonetown", Patrol No. 66



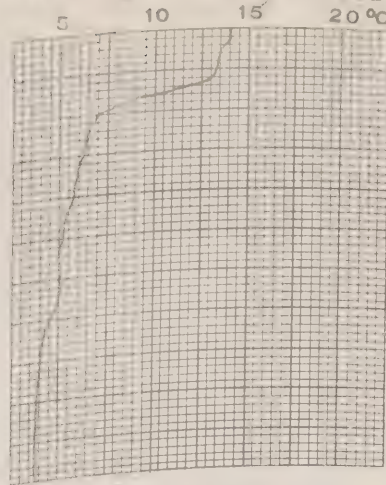
C.C.G.S. "Stonetown", Patrol No. 66



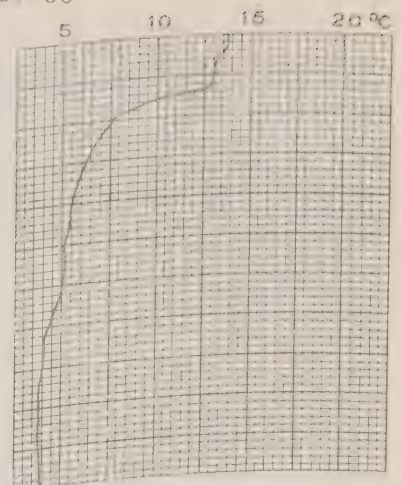
C.C.G.S. "Sinetown", Patrol No. 66



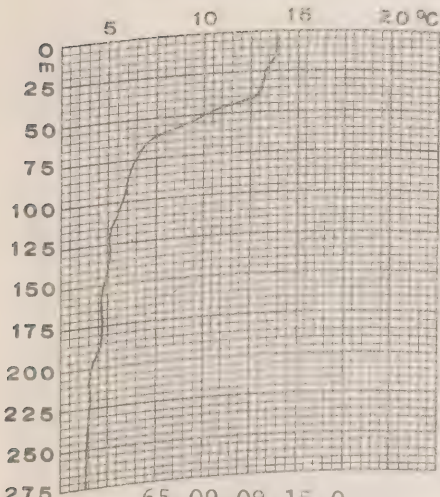
65-09-09-06.0
50°18'N
144°55'W



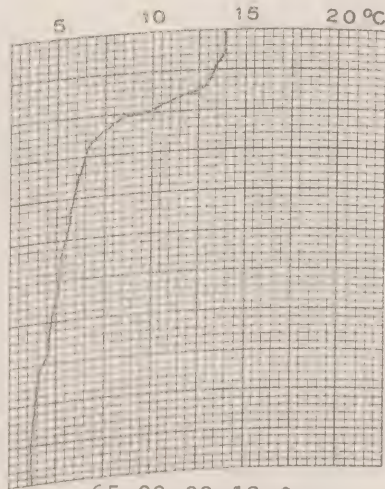
65-09-09-09.0
50°00'N
145°00'W



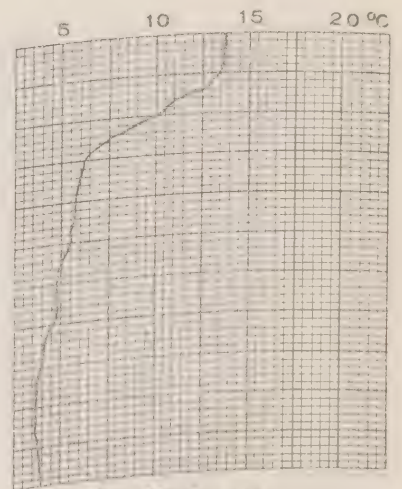
65-09-09-12.0
50°03'N
145°06'W



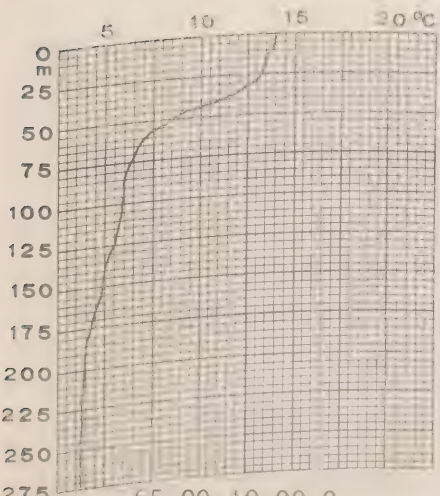
65-09-09-15.0
50°03'N
145°07'W



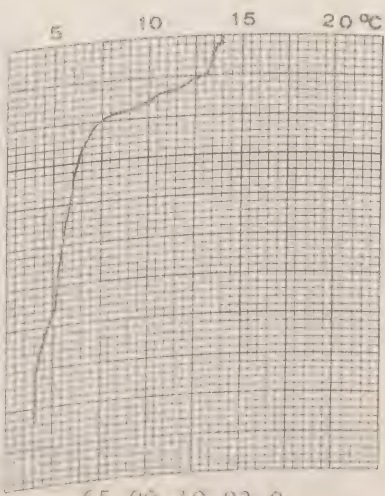
65-09-09-18.0
50°08'N
145°04'W



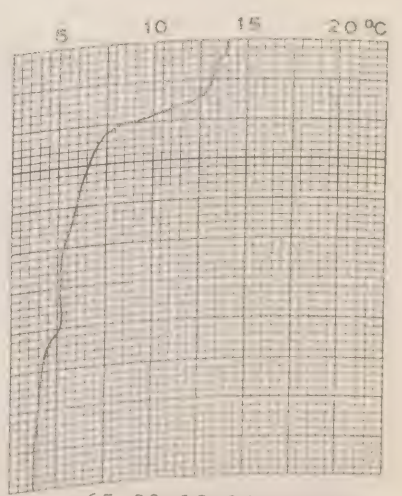
65-09-09-21.0
50°12'N
145°05'W



65-09-10-00.0
50°17'N
145°05'W

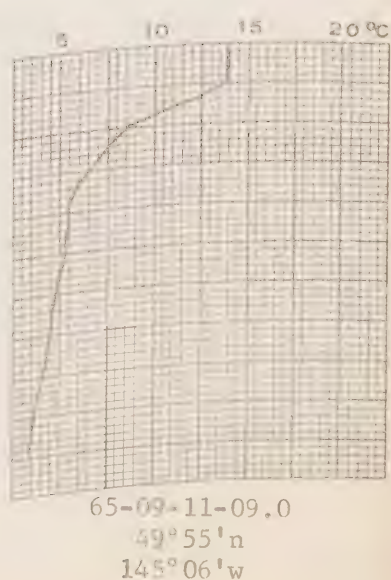
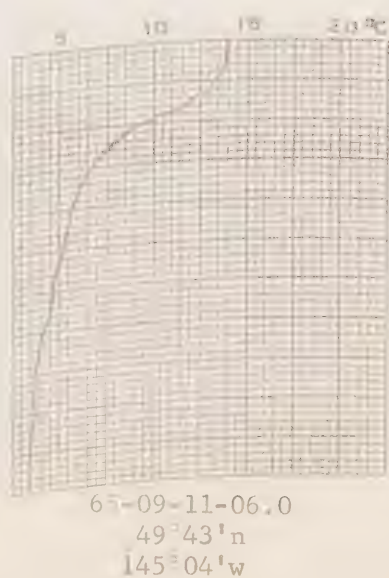
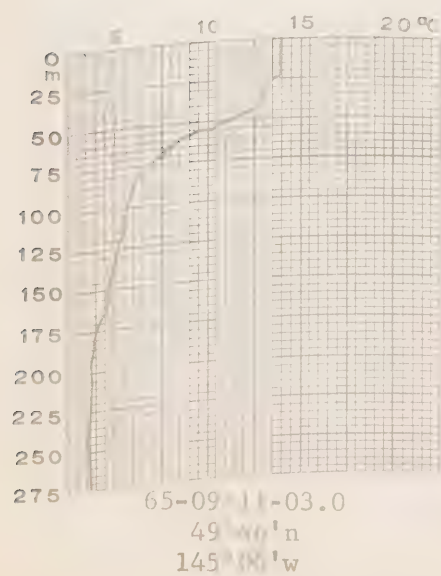
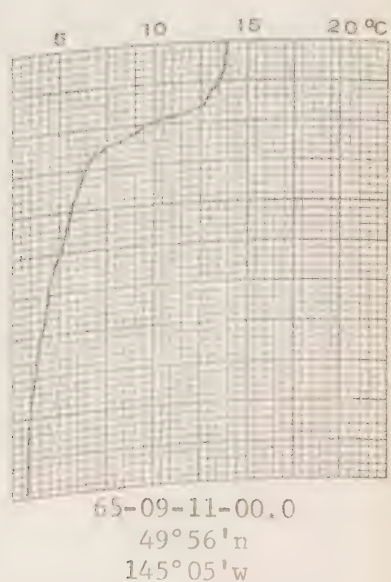
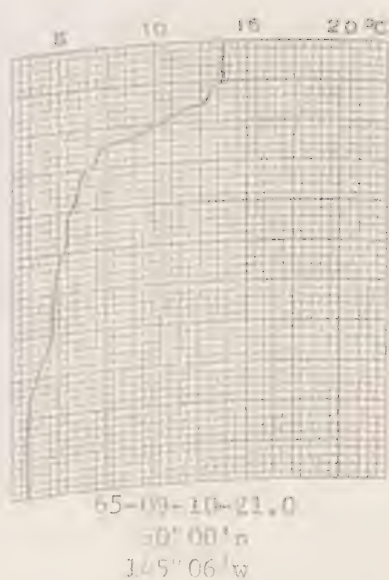
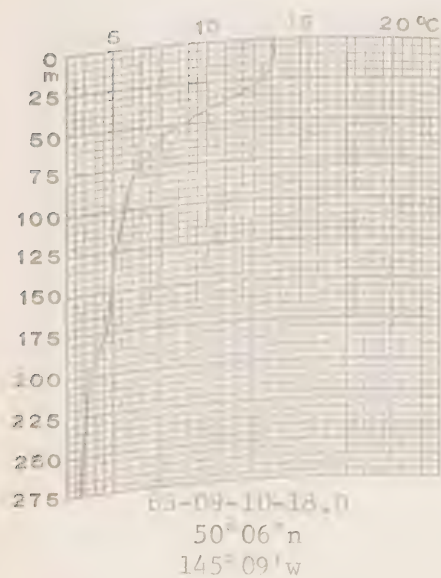
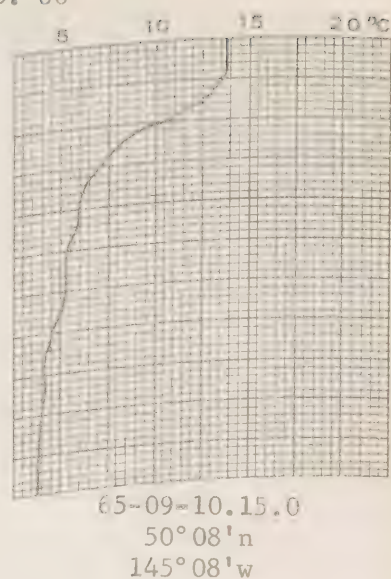
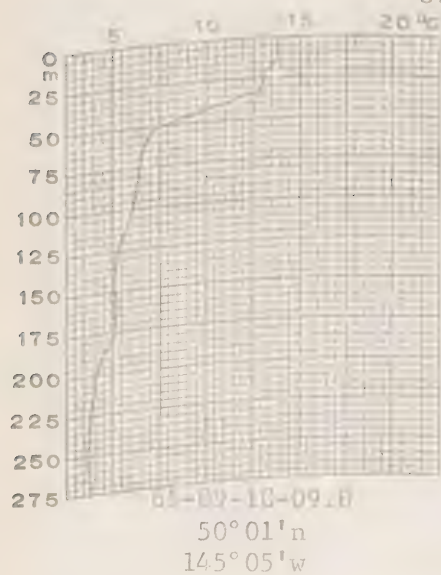


65-09-10-03.0
50°15'N
145°03'W

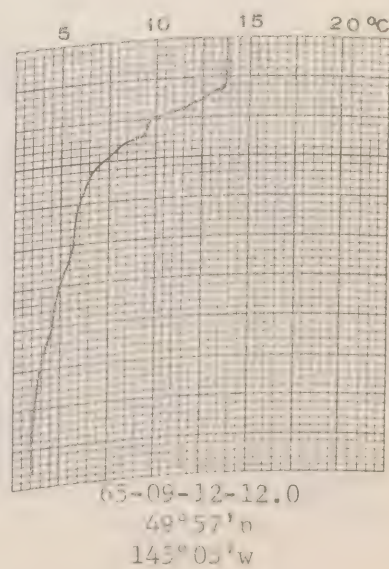
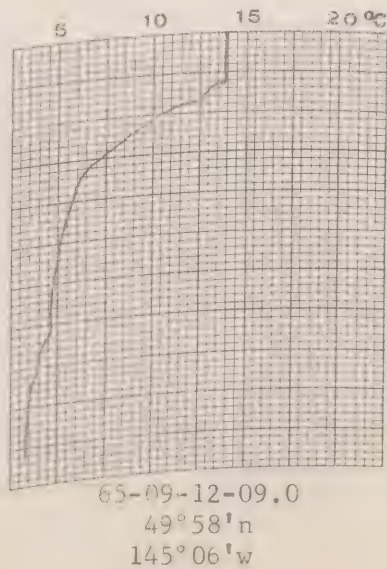
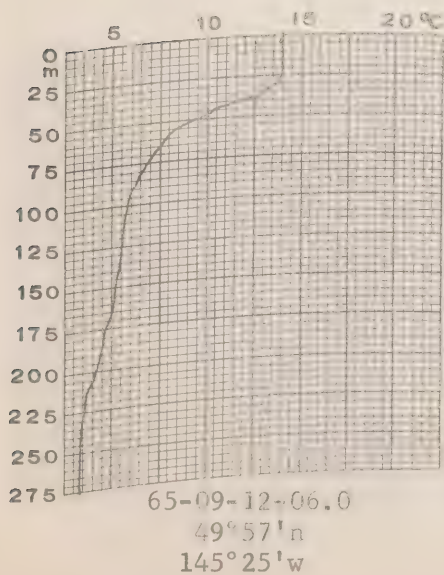
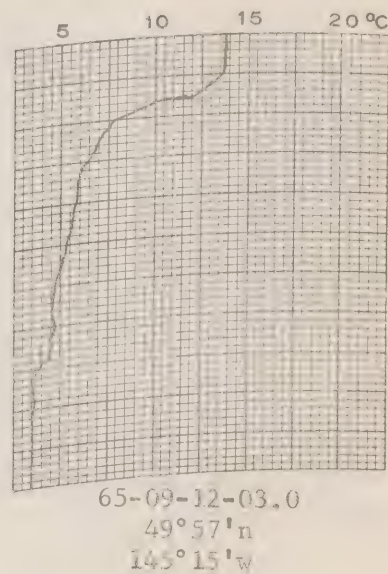
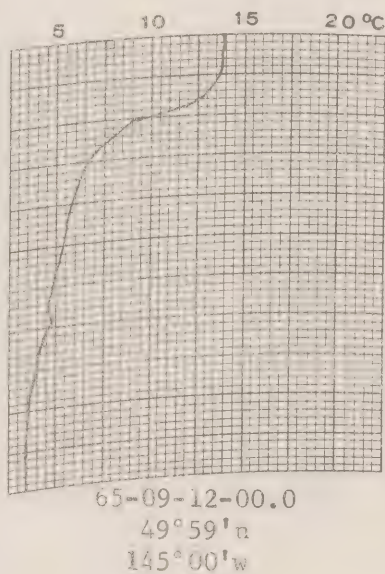
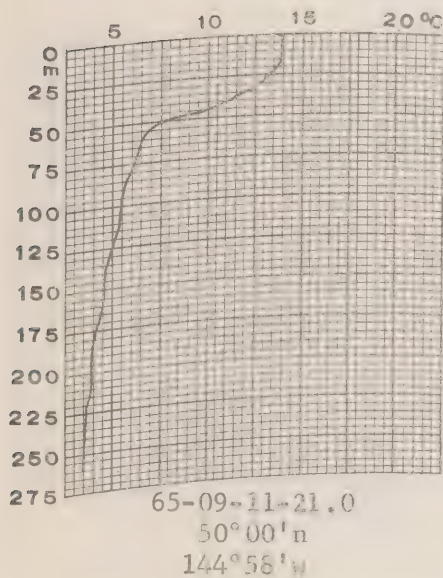
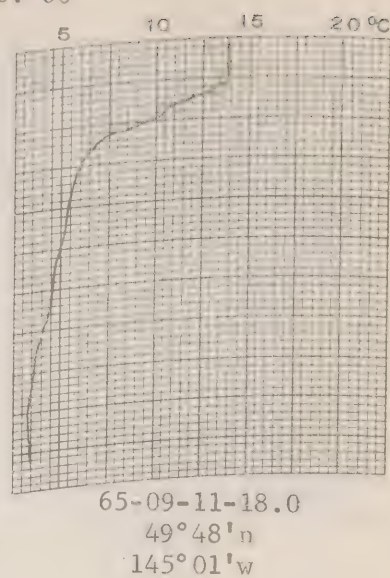
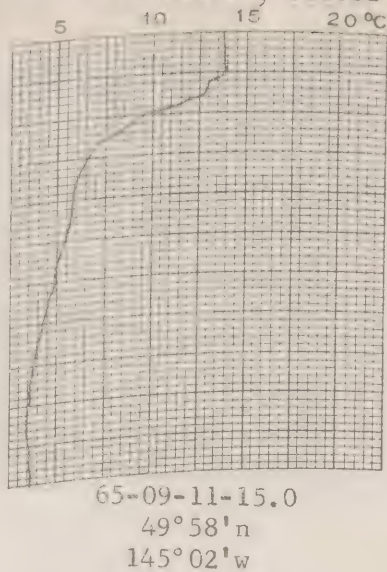
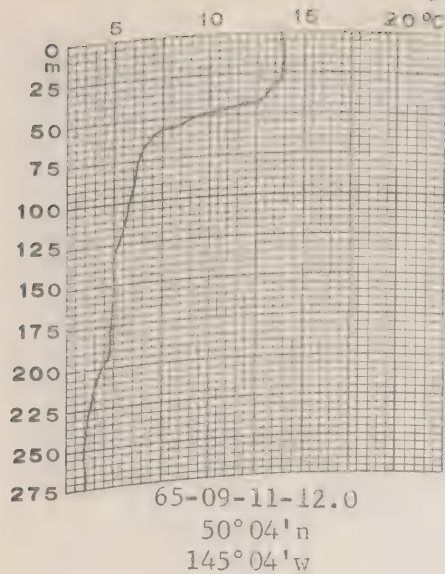


65-09-10-06.0
49°58'N
145°04'W

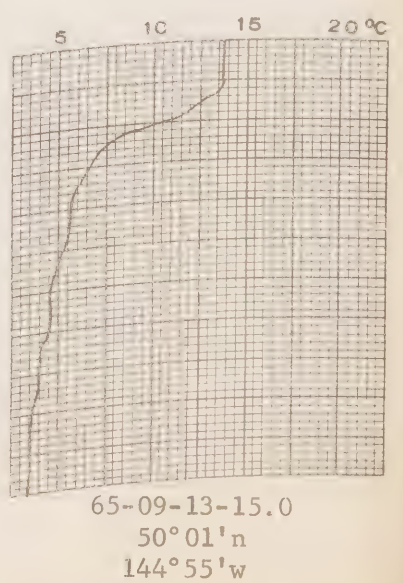
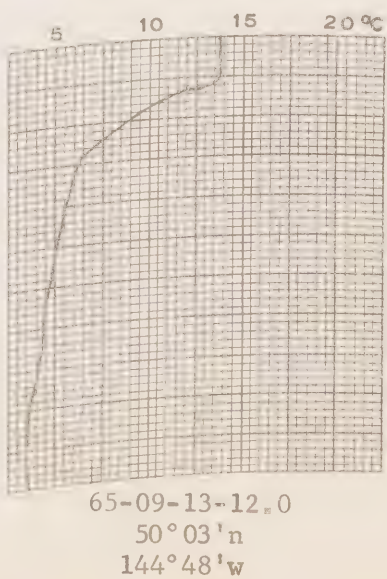
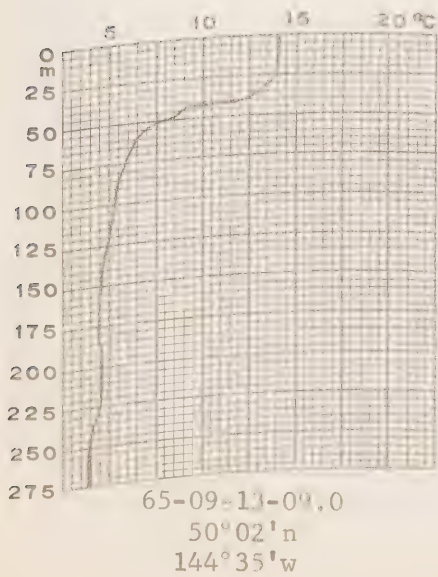
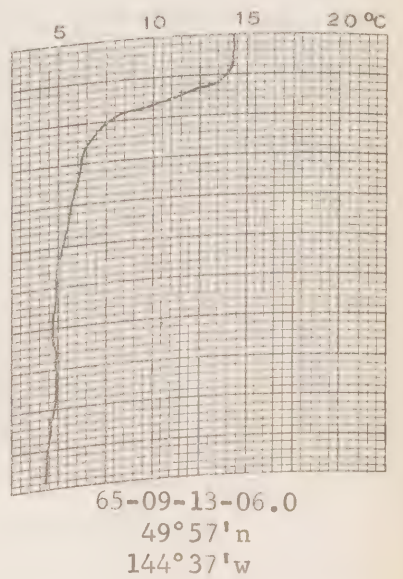
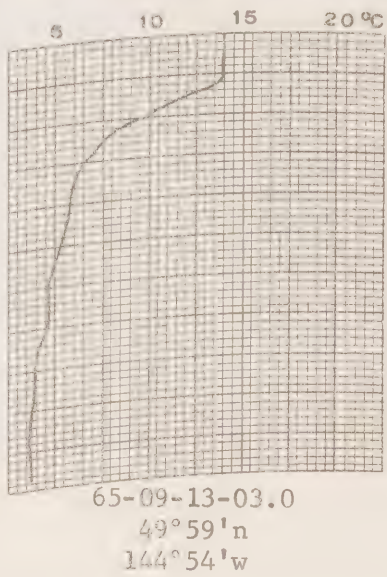
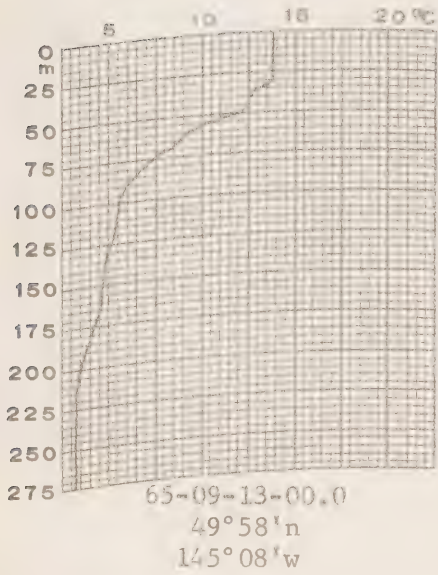
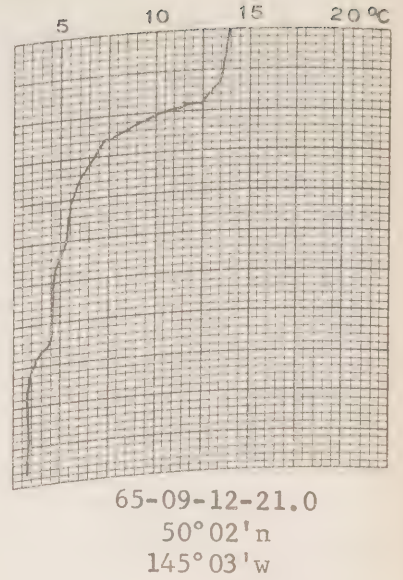
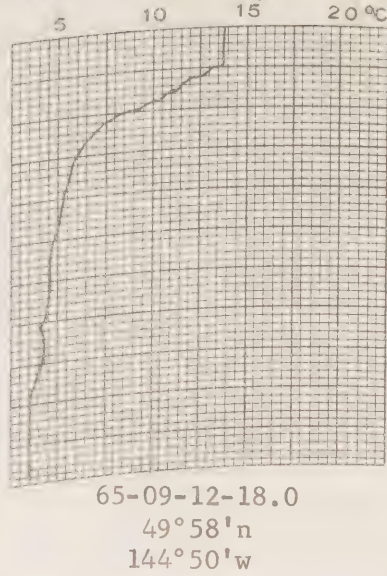
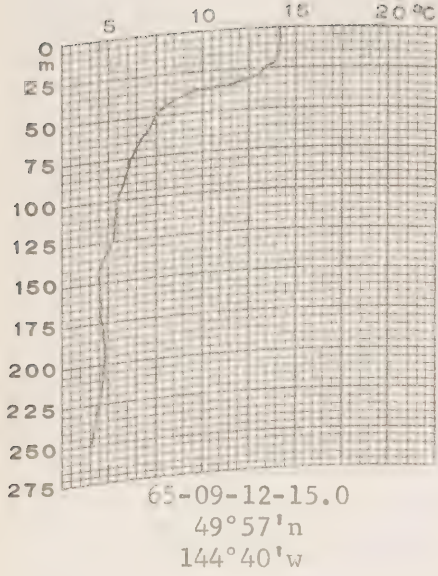
C.C.G.S. "Stonetown", Patrol No. 66



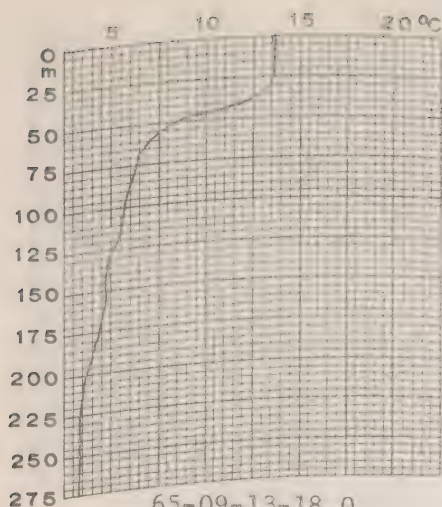
C.C.G.S. "Stonetown", Patrol No. 66



C.C.G.S. "Stonetown", Patrol No. 66



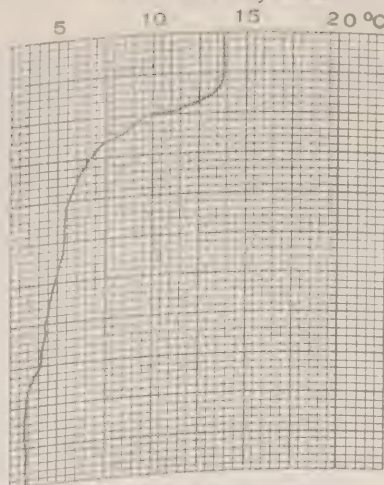
C.C.G.S. "Stonetown", Patrol No. 56



65-09-13-18.0

50°01'n

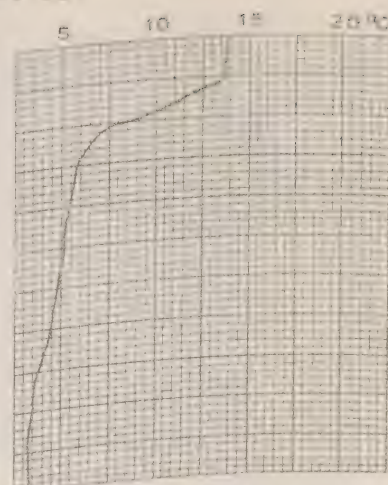
145°03'w



65-09-13-21.0

49°59'n

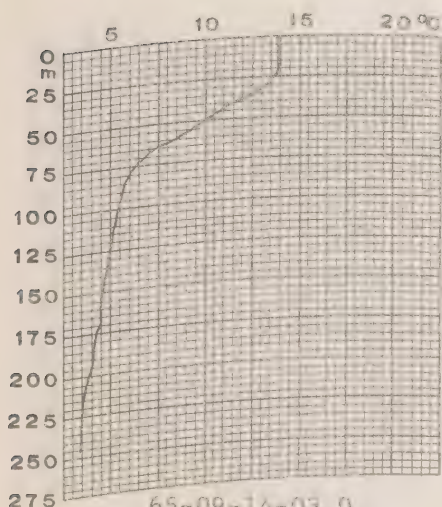
145°10'w



65-09-14-00.0

49°57'n

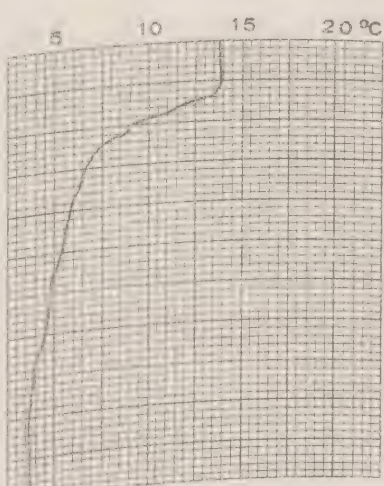
145°17'w



65-09-14-03.0

50°00'n

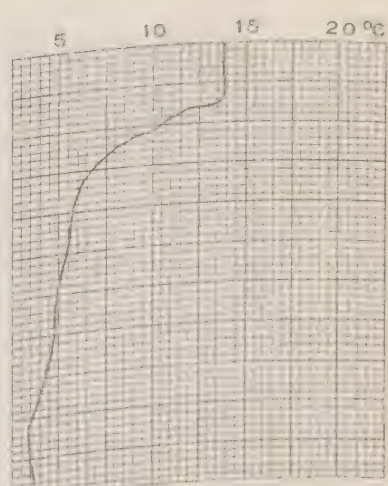
145°07'w



65-09-14-06.0

49°58'n

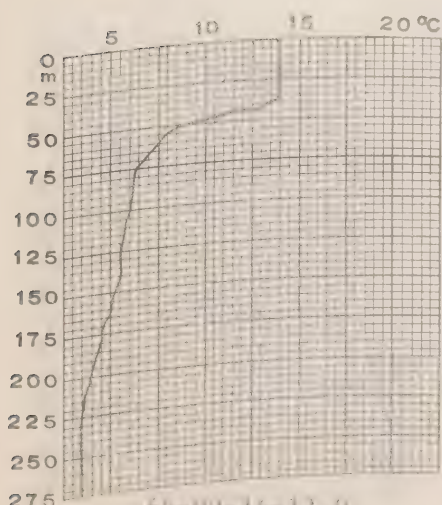
145°05'w



65-09-14-09.0

49°54'n

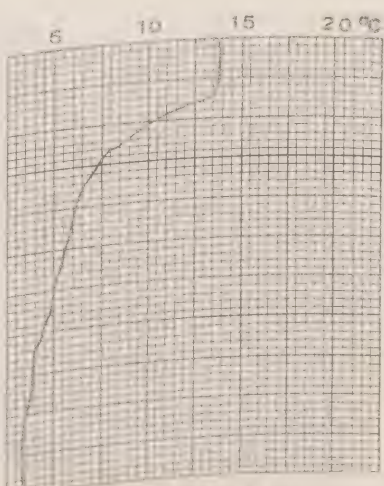
145°14'w



65-09-14-12.0

49°51'n

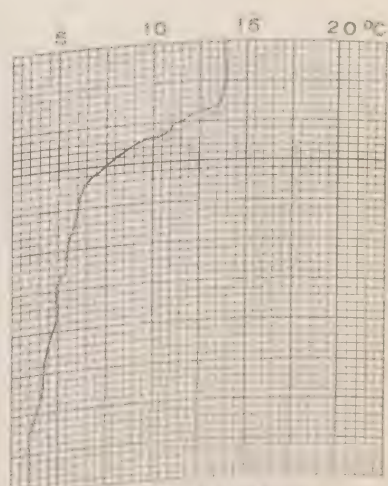
145°21'w



65-09-14-15.0

49°57'n

145°32'w

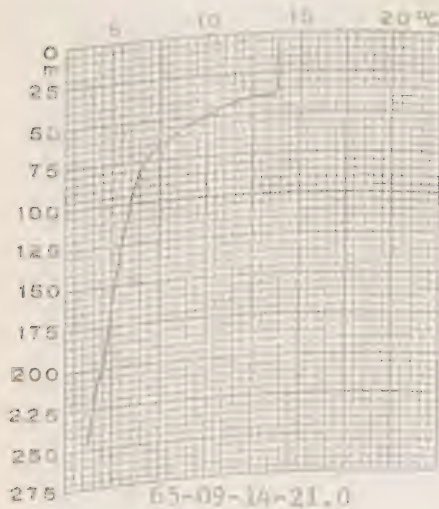


65-09-14-18.0

49°45'n

145°35'w

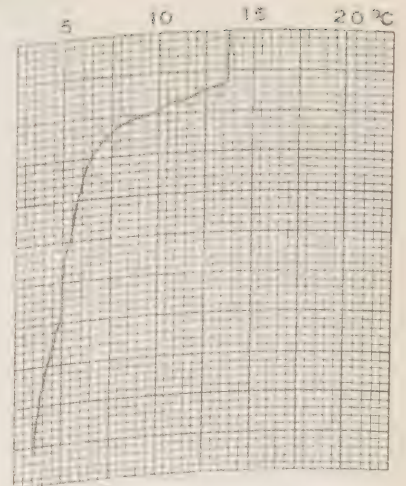
C.C.G.S. "Stonetown", Patrol No. 66



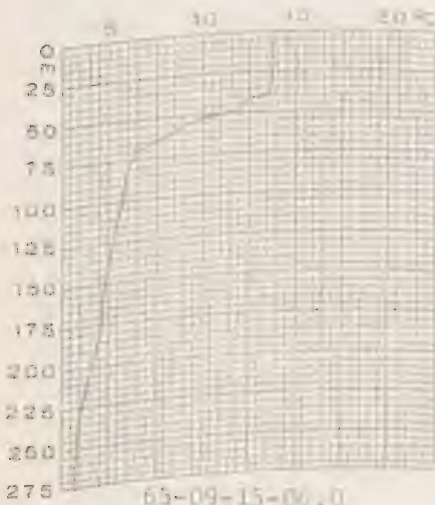
65-09-14-21.0
49°57'n
144°17'w



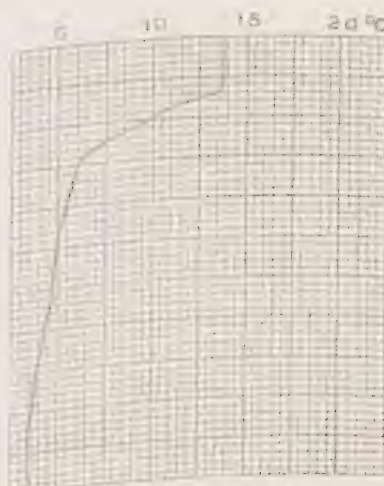
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50°06'n
144°57'w



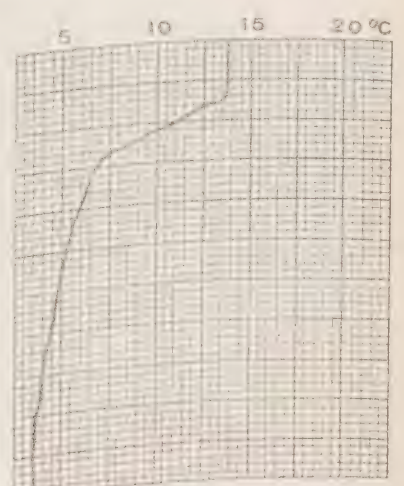
65-09-15-03.0
50°16'n
144°34'w



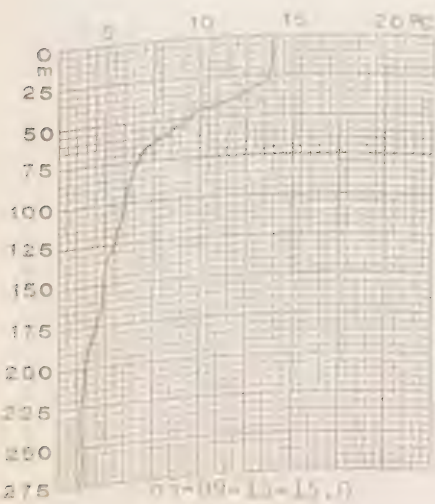
65-09-15-06.0
50°15'n
144°35'w



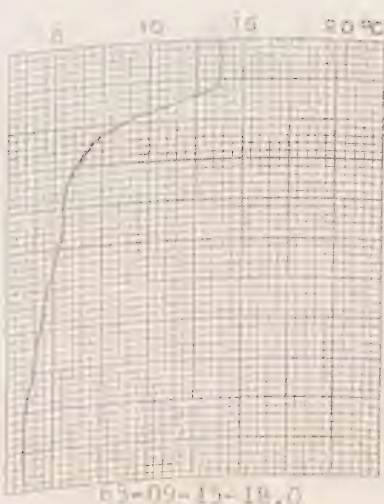
65-09-15-09.0
50°13'n
144°38'w



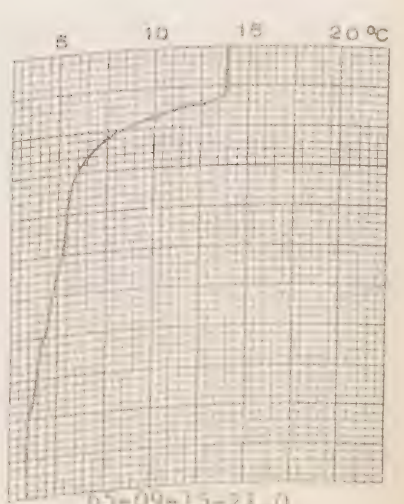
65-09-15-12.0
50°08'n
144°49'w



65-09-15-15.0
50°02'n
145°00'w

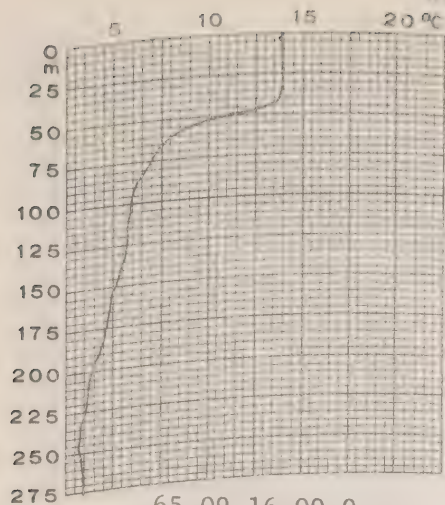


65-09-15-18.0
49°58'n
145°05'w



65-09-15-21.0
49°53'n
145°07'w

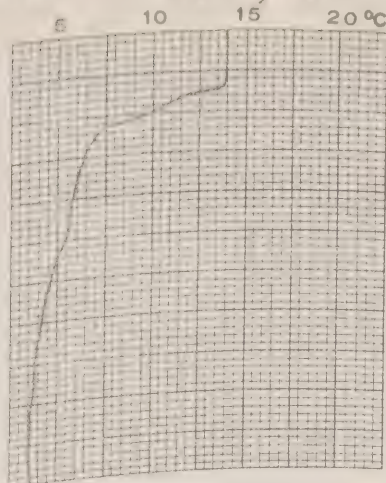
C.C.G.S. "Stonetown", Patrol No. 66



65-09-16-00.0

49°49'n

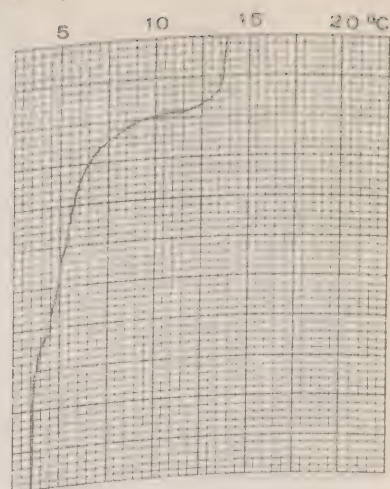
145°09'w



65-09-16-03.0

50°07'n

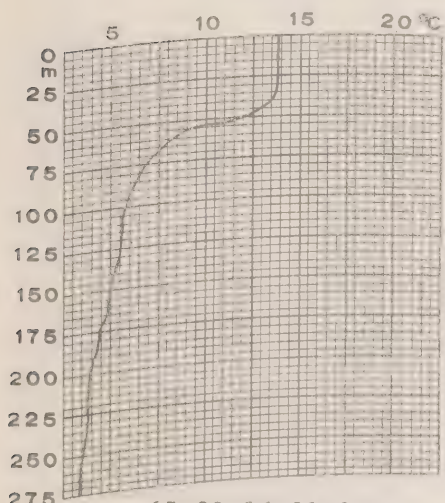
144°48'w



65-09-16-06.0

50°05'n

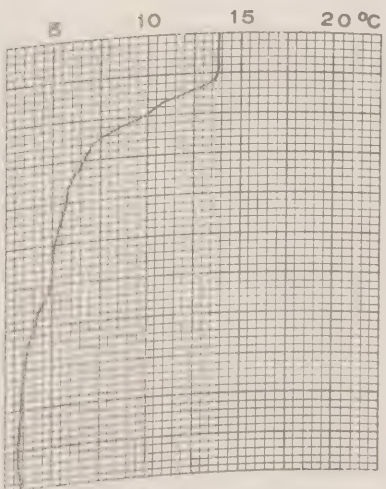
144°52'w



65-09-16-09.0

50°02'n

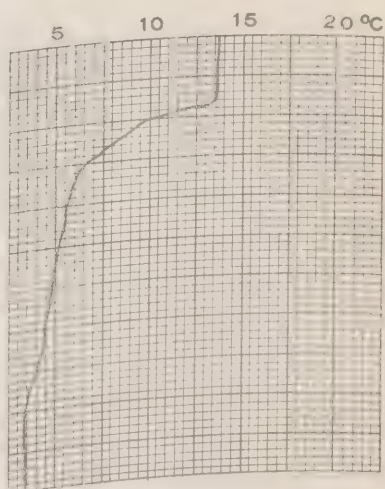
145°00'w



65-09-16-12.0

49°53'n

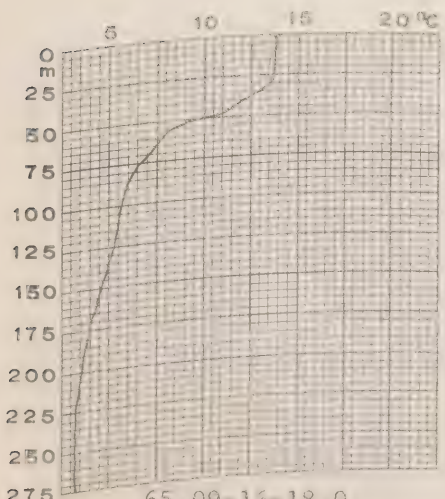
145°09'w



65-09-16-15.0

49°45'n

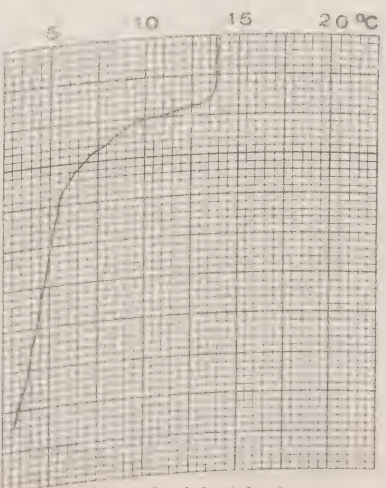
145°20'w



65-09-16-18.0

49°45'n

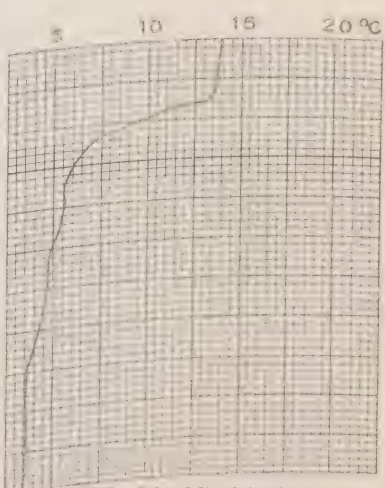
145°25'w



65-09-16-21.0

49°54'n

145°09'w

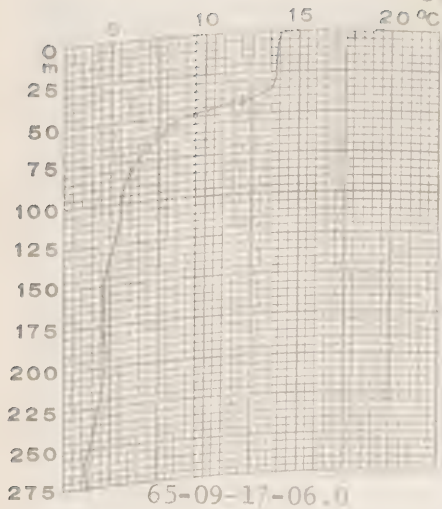


65-09-17-00.0

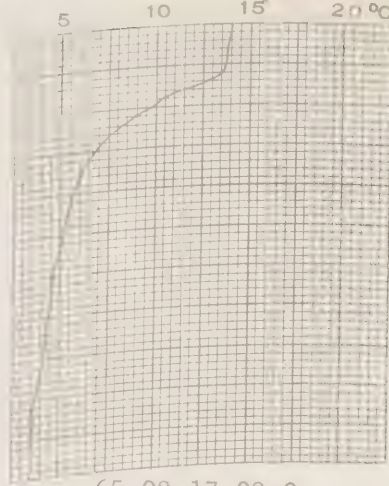
50°02'n

144°57'w

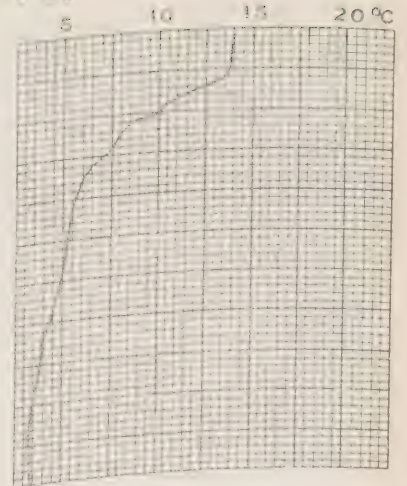
C C G.S. 'Stonetown' Patrol No. 65



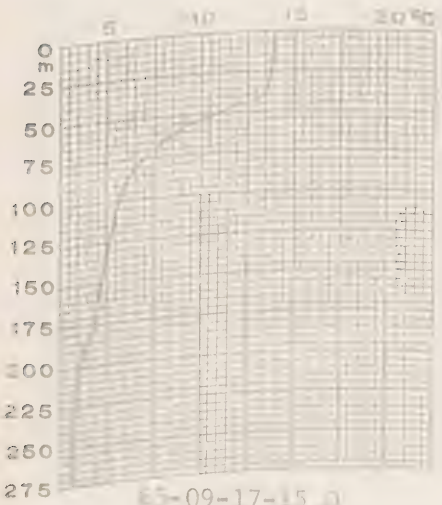
65-09-17-06.0
 50° 07' n
 144° 37' w



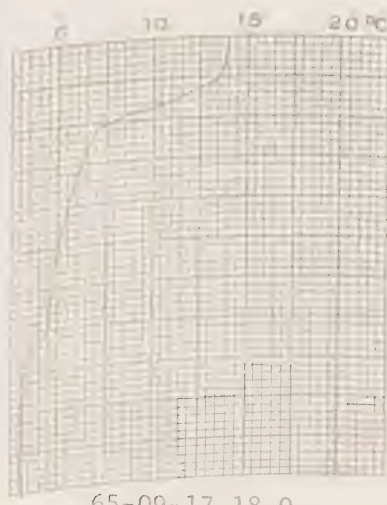
65-09-17-09.0
 50° 02' n
 144° 41' w



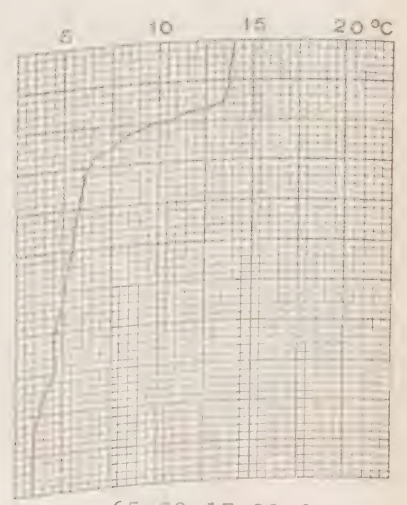
65-09-17-12.0
 50° 01' n
 144° 59' w



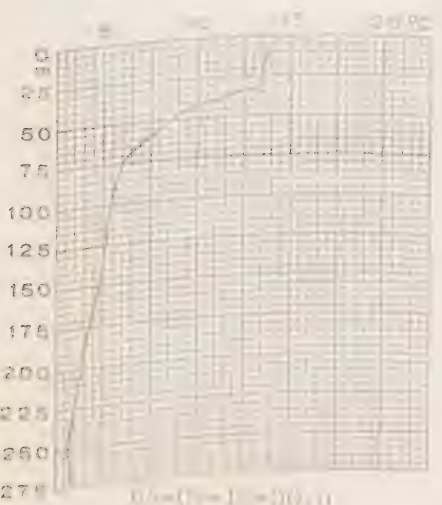
65-09-17-15.0
 50° 05' n
 145° 02' w



65-09-17-18.0
 50° 06' n
 145° 02' w



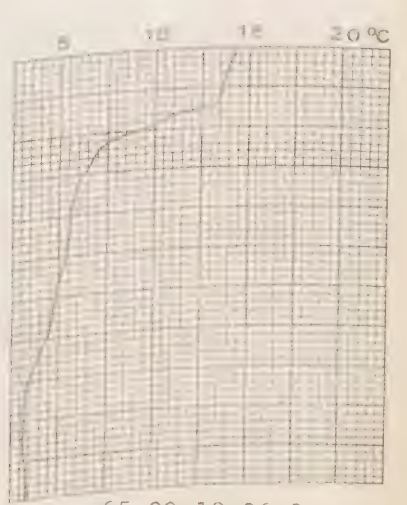
65-09-17-21.0
 50° 06' n
 145° 07' w



65-09-18-00.0
 50° 06' n
 145° 15' w

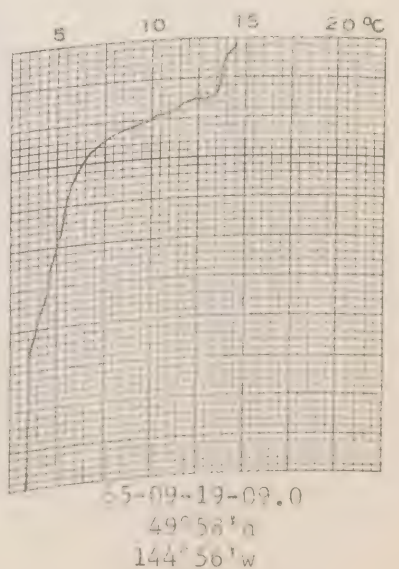
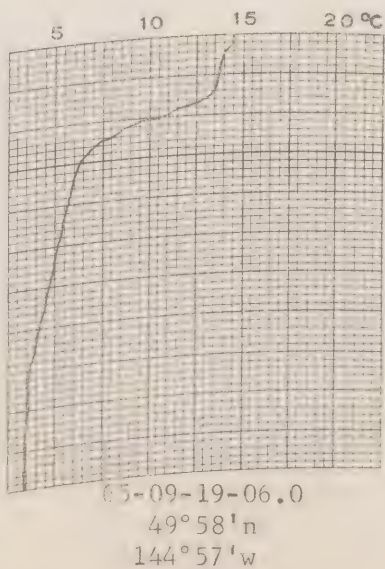
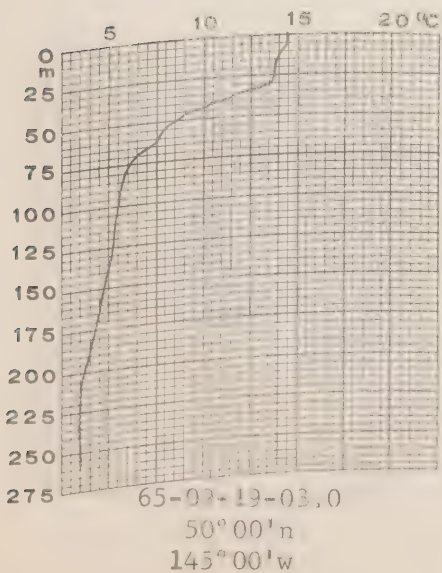
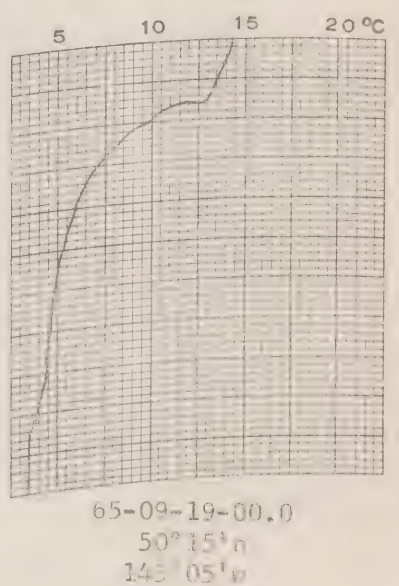
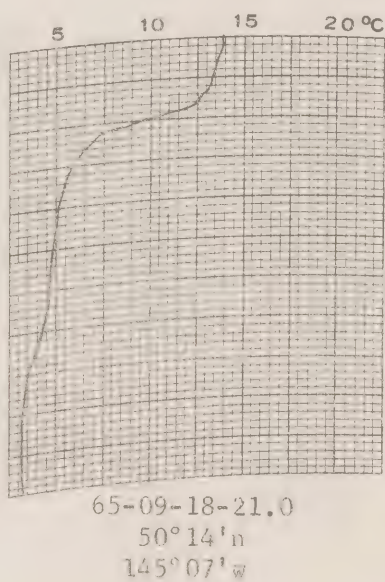
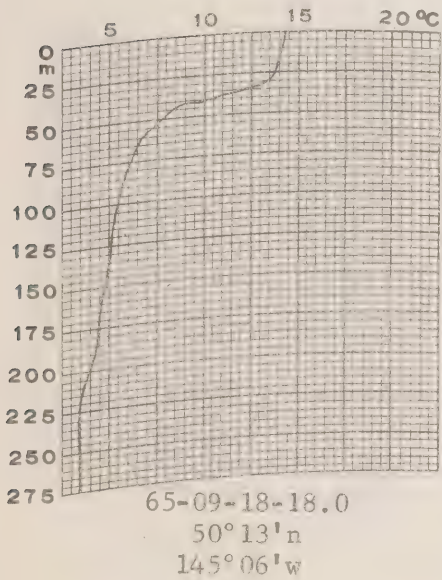
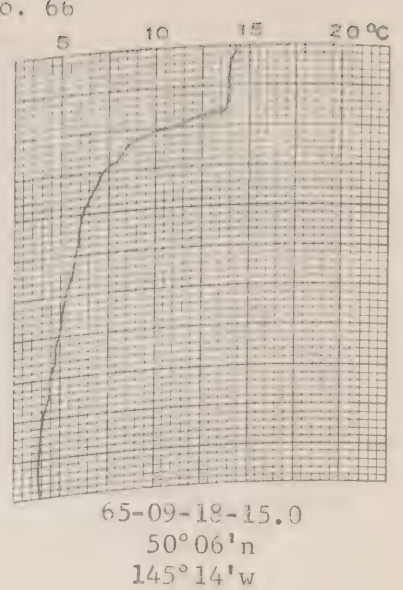
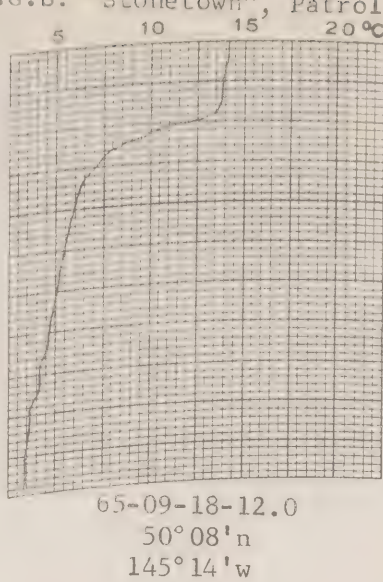
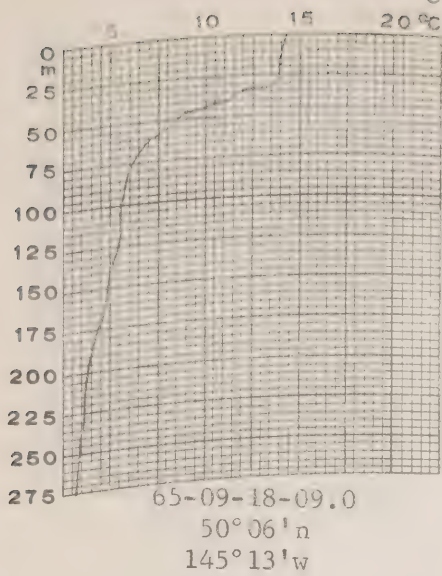


65-09-18-03.0
 50° 05' n
 145° 10' w

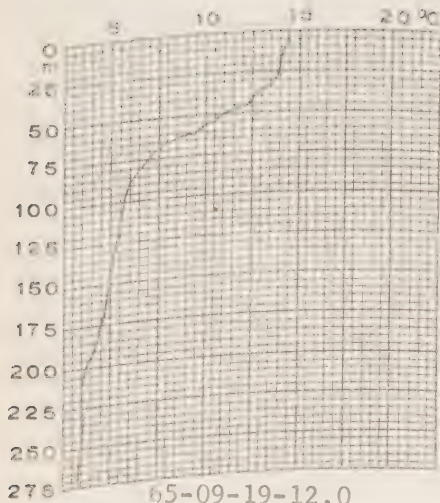


65-09-18-06.0
 50° 06' n
 145° 11' w

C.C.G.S. "Stonetown", Patrol No. 66



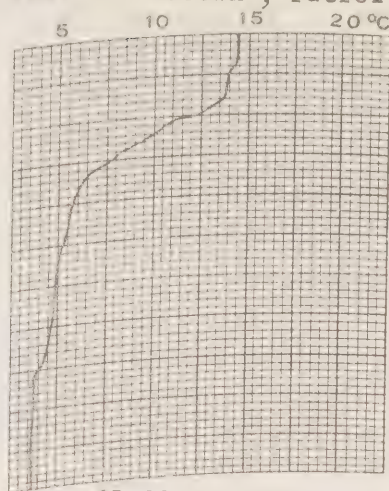
C.C.G.S. "Stonetown", Patrol No. 66



65-09-19-12.0

50°01'n

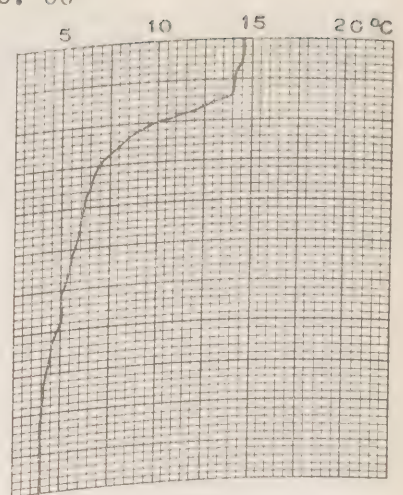
144°56'w



65-09-19-15.0

50°08'n

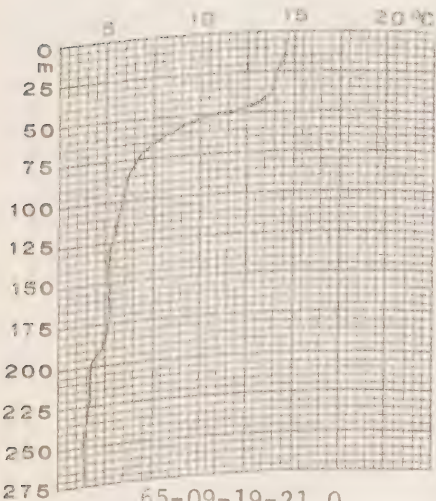
144°55'w



65-09-19-18.0

50°07'n

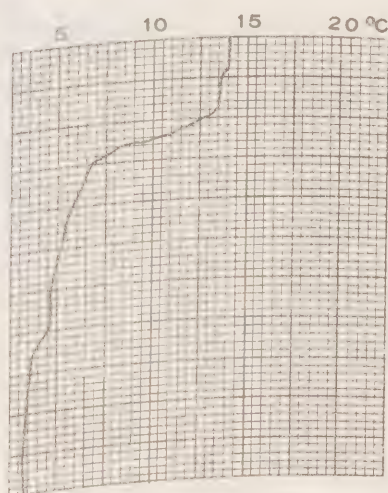
144°54'w



65-09-19-21.0

50°09'n

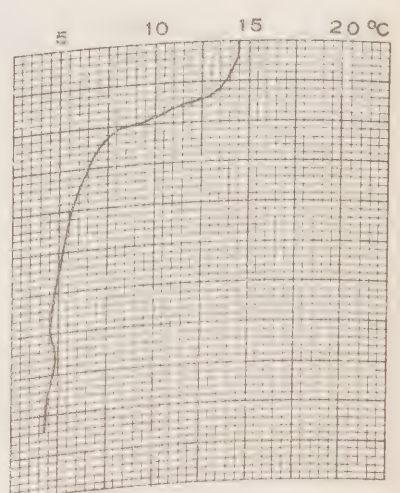
144°48'w



65-09-20-00.0

50°11'n

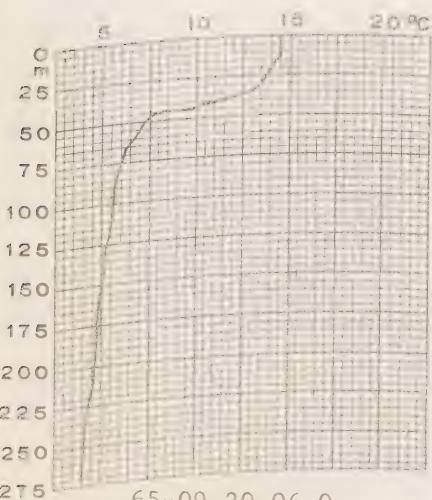
144°44'w



65-09-20-03.0

50°08'n

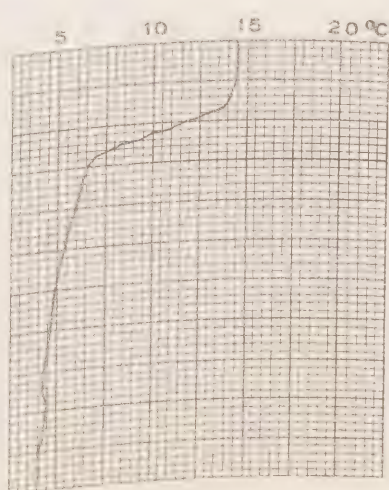
144°26'w



65-09-20-06.0

50°06'n

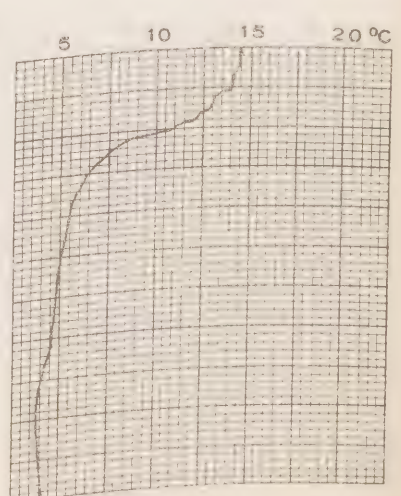
144°00'w



65-09-20-09.0

50°04'n

143°34'w

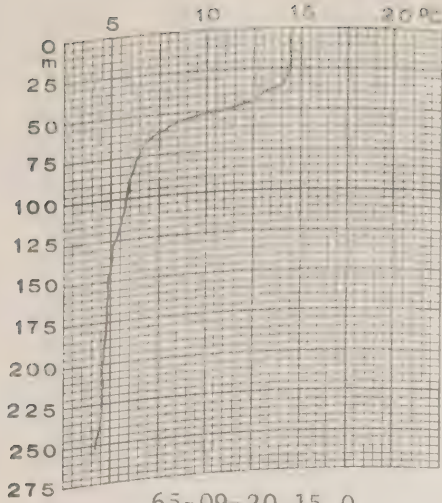


65-09-20-12.0

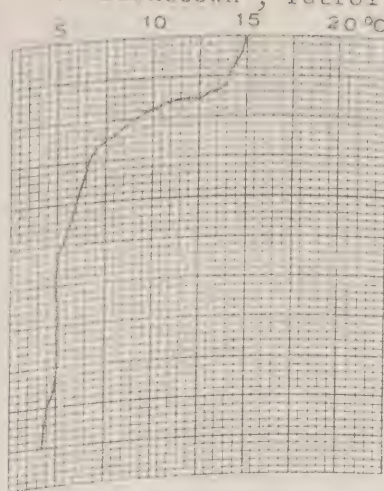
50°01'n

143°05'w

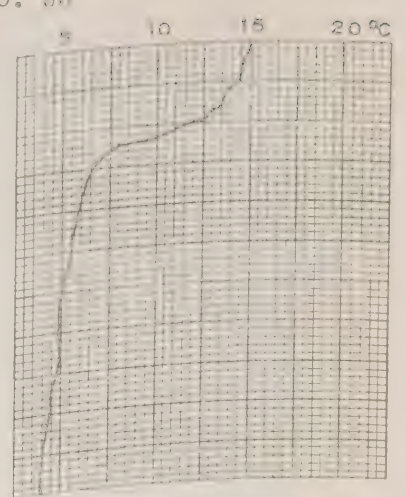
C.C.G.S. "Stonetown", Patrol No. 66



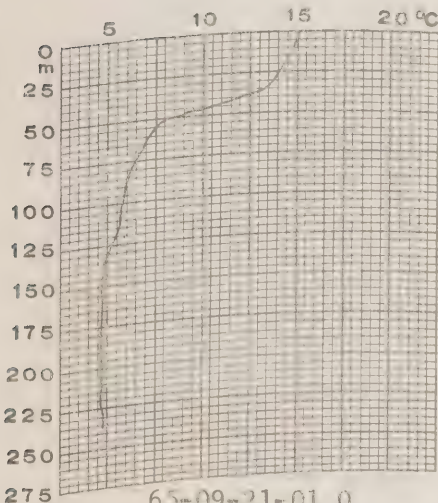
65-09-20-15.0
49°57'n
142°35'w



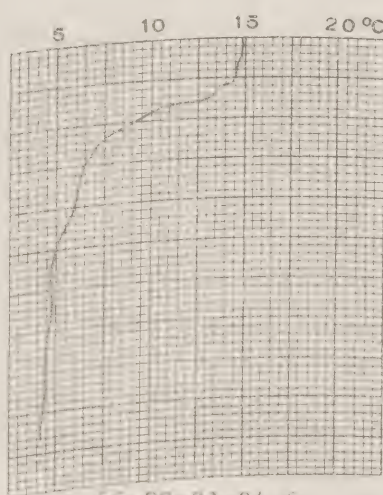
65-09-20-19.3
49°50'n
141°40'w



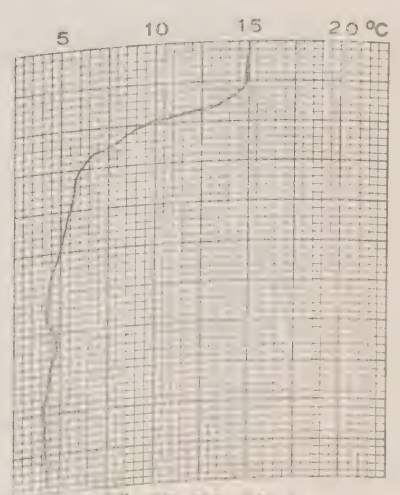
65-09-20-22.5
49°46'n
140°40'w



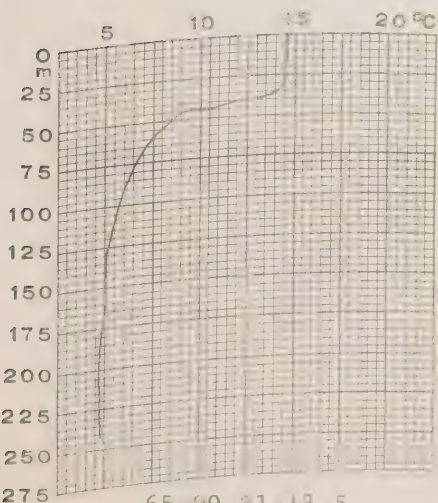
65-09-21-01.0
49°40'n
139°40'w



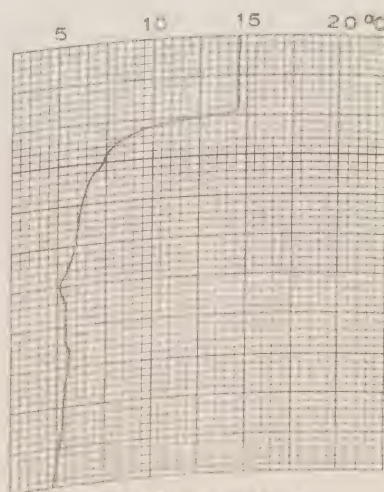
65-09-21-04.6
49°38'n
138°40'w



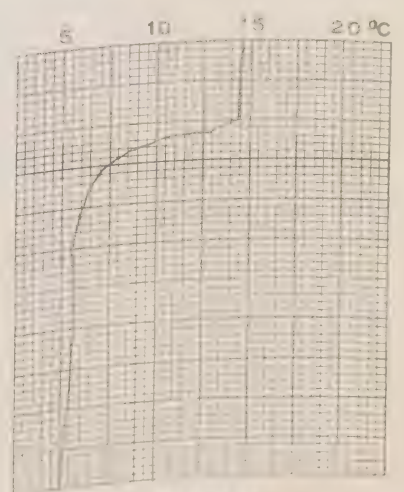
65-09-21-07.5
49°33'n
137°40'w



65-09-21-13.5
49°28'n
135°40'w

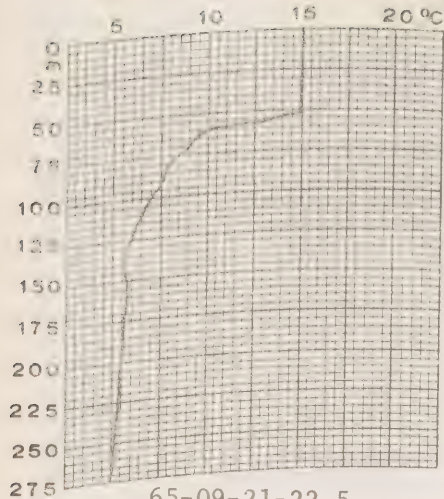


65-09-21-16.5
49°23'n
134°40'w



65-09-21-19.5
49°16'n
133°40'w

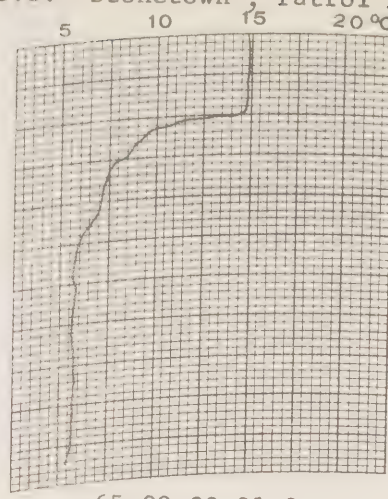
C.C.G.S. "Stonetown", Patrol No. 66



65-09-21-22.5

49° 12' n

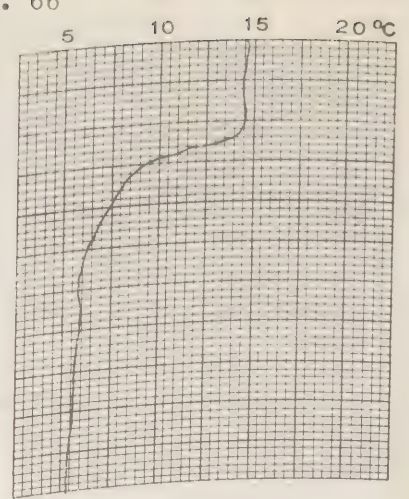
132° 40' w



65-09-22-01.8

49° 08' n

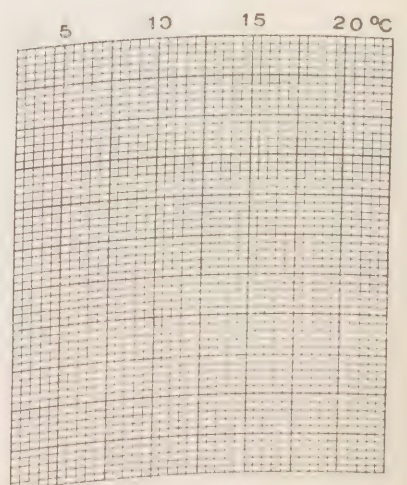
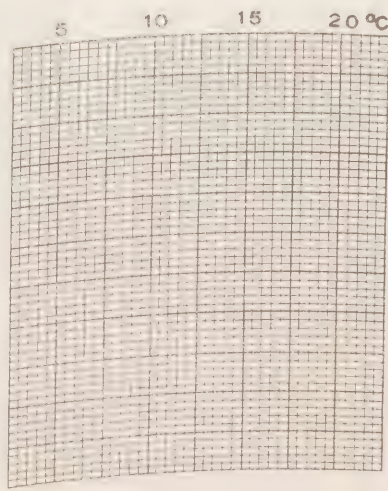
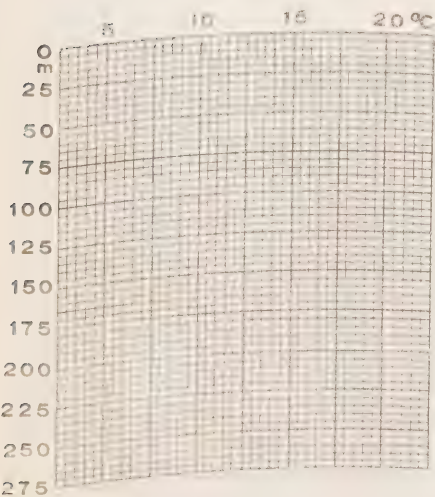
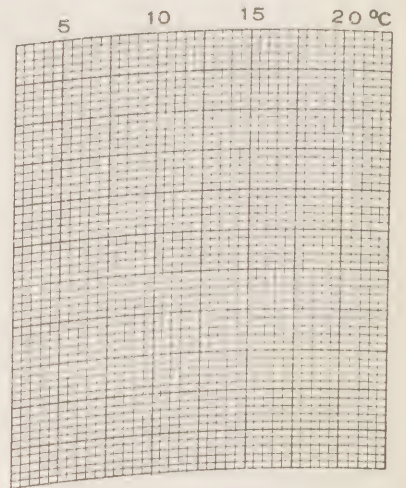
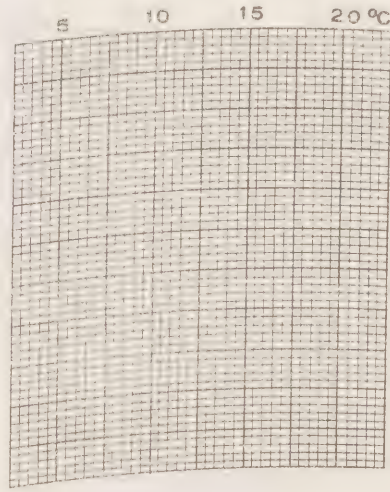
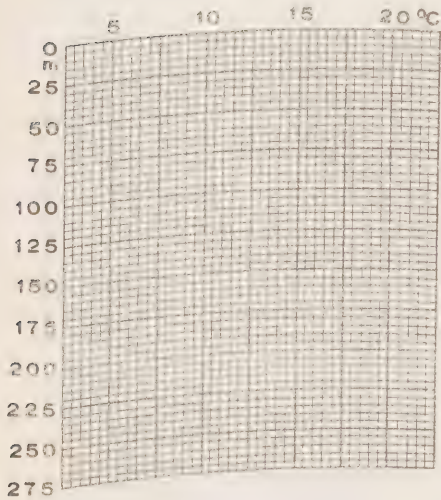
131° 40' w



65-09-22-05.2

49° 04' n

130° 40' w



SECTION V

Surface Salinity Data

Surface Salinity Observations

Date-Time	Position		Salinity
GMT	Latitude	Longitude	‰
CCGS "St. Catharines", Survey P-65-3			
65-07-03-07.5	48°47'n	127°40'w	32.204
03-11.0	48°51'	128°40'	32.160
03-14.0	48°56'	129°40'	32.370
04-21.5	49°06'	131°40'	32.590
04-03.9	49°15'	133°40'	32.541
04-10.7	49°22'	135°40'	32.498
04-19.0	49°30'	137°40'	32.584
05-01.9	49°36'	139°40'	32.529
05-09.2	49°40'	141°40'	32.569
05-20.2	49°54'	143°40'	32.504
08-00.0	50°05'	145°08'	32.587
09-00.0	50°01'	144°52'	32.579
10-00.0	49°56'	144°55'	32.562
11-00.0	50°07'	144°55'	32.534
12-00.0	49°56'	144°48'	32.580
13-00.0	49°57'	144°52'	32.592
14-00.0	49°57'	144°50'	32.581
15-00.0	50°02'	144°57'	32.600
16-00.0	50°00'	144°59'	32.524
17-00.0	49°55'	144°52'	32.567
18-00.0	50°03'	144°52'	32.493
19-00.0	49°48'	145°08'	32.527
20-00.0	49°58'	144°54'	32.542
21-00.0	50°00'	144°51'	32.531
22-00.0	50°00'	144°56'	32.532
23-00.0	50°03'	144°54'	32.528
24-00.0	49°58'	144°56'	32.519
25-00.0	50°03'	144°50'	32.512
26-00.0	50°02'	145°05'	32.577
27-00.0	50°14'	145°19'	32.604
28-00.0	50°02'	145°08'	32.440
29-00.0	50°02'	145°02'	32.554
30-00.0	50°04'	145°06'	32.553
31-00.0	49°53'	144°29'	32.532
65-08-01-00.0	50°08'	144°59'	32.555
02-00.0	50°08'	144°49'	32.557
04-00.0	49°59'	144°52'	32.492
05-00.0	50°00'	145°02'	32.519
06-00.0	50°02'	145°02'	32.547
07-00.0	49°57'	145°15'	32.543
08-00.0	49°54'	145°03'	32.524
09-00.0	50°00'	145°00'	32.568

Surface Salinity Observations

Date-Time	Position		Salinity
GMT	Latitude	Longitude	‰
CCGS "St. Catharines", Survey P-65-3			
65-08-09-05.0	49°58'	143°54'	32.550
10-01.3	49°37'	139°40'	32.493
10-08.0	49°30'	137°40'	32.536
10-15.0	49°23'	135°40'	32.553
10-21.7	49°14'	133°40'	32.497
11-04.0	49°05'	131°40'	32.590
11-11.3	48°55'	129°40'	32.347

Surface Salinity Observations

Date-Time	Position		Salinity
GMT	Latitude	Longitude	‰
CCGS "Stonetown", Patrol No. 66			
65-08-11-00.0	49°56'n	145°04'w	32.586
12-00.0	49°53'	144°42'	32.530
13-00.0	49°59'	144°41'	32.560
14-00.0	50°01'	145°01'	32.555
15-00.0	49°56'	144°55'	32.568
16-00.0	49°56'	145°05'	32.585
17-00.0	50°13'	144°36'	32.581
18-00.0	50°08'	144°48'	32.552
19-00.0	50°05'	144°45'	32.610
20-00.0	50°12'	144°34'	32.607
21-00.0	50°07'	145°07'	32.578
23-00.0	49°57'	145°05'	32.552
24-00.0	49°44'	145°15'	32.571
25-00.0	49°51'	144°46'	32.555
26-00.0	50°03'	145°02'	32.557
27-00.0	49°53'	144°55'	32.607
28-00.0	49°58'	144°40'	32.568
29-00.0	50°09'	144°55'	32.568
31-00.0	50°01'	145°00'	32.554
65-09-01-00.0	49°59'	144°37'	32.535
02-00.0	49°55'	145°00'	32.601
03-00.0	49°57'	145°00'	32.546
04-00.0	49°54'	144°37'	32.530
05-00.0	49°57'	144°53'	32.557
06-00.0	49°59'	145°00'	32.579
07-00.0	50°00'	144°53'	32.552
08-00.0	50°04'	145°00'	32.559
09-00.0	50°14'	144°53'	32.568
10-00.0	50°17'	145°05'	32.607
11-00.0	49°56'	145°05'	32.588
12-00.0	49°59'	145°00'	32.553
13-00.0	49°58'	145°08'	32.556
14-00.0	49°57'	145°17'	32.552
15-00.0	50°06'	144°57'	32.524
16-00.0	49°49'	145°09'	32.519
17-00.0	50°02'	144°57'	32.510
18-00.0	50°06'	145°15'	32.513
19-00.0	50°15'	145°05'	32.542
20-00.0	50°11'	144°44'	32.502

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